

VIII. *A Review of the Natural Order Myrsineæ.* By M. ALPHONSE DE CANDOLLE, *Honorary Professor and one of the Directors of the Botanic Garden at Geneva.*

Read March 5th, and April 16th, 1833.

DURING a visit to England, with the view of assisting Dr. Wallich in the distribution of the great Herbarium given, since that time, by the Honourable East India Company to the Linnean Society, this celebrated botanist did me the honour of entrusting to me the care of describing several new species collected by him, and among others, those belonging to the natural order of *Myrsineæ*. My first intention was, not to extend my researches beyond the Indian species; but I was soon convinced that such an addition to a limited order like this could not be made without reviewing the whole of it, as I had already done in a similar case in the natural order of *Anonacæ**. It led me, of course, to a better classification. I must confess, however, that doubts still remain as to the precise limits of some genera, on account of the difficulty of ascertaining from dry specimens the number and insertion of the ovula.

This natural order was named by Ventenat *Ophiospermes*, and by some botanists *Ardisiaceæ*; but Mr. Brown, who in a few words in his *Prodromus Floræ Novæ Hollandiæ* threw considerable light on the subject, proposed for it the name of *Myrsineæ*, which has been since generally adopted.

Their place in the very intricate net of affinities is now well established between *Sapotææ* and *Primulacææ*, notwithstanding their remarkable analogy with another remote order, that of *Rhamnææ*. Were the relative affinities of plants to be represented upon a sphere, as the position of islands, these different orders would be all under the same degree of latitude, but *Rhamnææ* under a very distant longitude.

Myrsineæ differ from *Sapotææ* by the constant deficiency of stamens alter-

* "Mémoire sur la Famille des Anonacées, et en particulier sur celles du Pays des Birmans," in the *Mémoires de la Société de Physique et d'Histoire Naturelle de Genève*, vol. v.

nating with the lobes of the corolla, so that, as in *Primulaceæ*, there remain only a number of stamens equal to the lobes of the corolla, and opposite to them. In this respect *Sapotæ* are but a regular state of *Myrsinæ* and *Primulaceæ*. Without this character of a double or simple verticil of stamens, no positive distinction would remain between these orders, as the direction of the embryo, erect or transverse, has been shown by Mr. Brown to be of no great consequence.

From *Primulaceæ*, the only distinctive character seems to be in the fruit not being dehiscent; the habit of the two orders is besides very different, *Primulaceæ* being herbaceous, and *Myrsinæ* more or less ligneous, sometimes even forming large trees. There may be also some difference in the shape of the grains of pollen. In *Primula grandiflora* they appear under the microscope to be rectangular; in *Primula sinensis* and *Primula Auricula* they are oblong, but with some irregularity, and with a disposition to show sometimes angular extremities and a quadrilateral form. In *Ardisia humilis*, *anceps*, *crenulata* and *cubana*, I saw nothing angular in them; but they are ovoid and very obtuse. In both orders they have no asperities by which cohesion takes place. Dr. Martius represents the grains of pollen as really round in *Cybianthus* and *Conomorpha* (*Cyb. laxiflorus*, Mart.); but I suppose they have been observed in water, which makes elliptic grains become round.

Some difficulty arises from the genus *Mæsa* (*Bæobotrys*) having a great number of seeds, as in many *Primulaceæ*, and an inferior ovary, as in the well-known and anomalous genus *Samolus*. But this last differs more from the true *Primulaceæ* than *Mæsa* does from *Myrsinæ*, because it has five small filaments alternating with the lobes of the corolla, so as to show the natural state of *Primulaceæ* and the constant abortion that prevails in them. When Dr. Bartling constituted a distinct family of *Samolus* and *Mæsa* among his extensive class of *Myrsinæ*, where *Primulaceæ* are also included, he omitted the fact of these five rudiments of stamens existing in *Samolus* and not in *Mæsa*. After all, were *Samolus* an extensive genus, and not limited to a few species only, it would have been considered worthy of forming a distinct order, intermediate, as *Myrsinæ*, between *Sapotæ* and *Primulaceæ*. At present, the best classification, I suppose, is to include among *Myrsinæ* the tribe of *Mæseæ*, and in *Primulaceæ* that of *Samoleæ*.

I therefore propose to divide the *Myrsineæ* into three tribes: 1st, *Ægicereæ*, with an erect embryo, nearly allied to *Sapotææ*, and particularly to *Jacquinia*; 2nd, *Ardisiææ*, including the bulk of true *Myrsineæ*; 3rd, *Mæseææ*, with an inferior ovarium, approaching to *Primulaceææ*, and especially to the tribe *Samoleææ*.

Mr. Brown has proposed* to include in the genus *Myrsine* certain species having a divided stigma, and formerly referred to *Ardisia*. I agree with him in removing them from *Ardisia*; but the best character of *Myrsine* consisting in its peculiar inflorescence, and these species not possessing that character, I prefer establishing them as a separate genus, to which I have given the old name of *Badula*.

I have proposed two new genera, namely, *Weigeltia* and *Conomorpha*, the characters of which are well marked. But my genus *Choripetalum* will be considered as a very great exception, and its principal character must still be thoroughly examined. It is composed of two species, which Dr. Wallich describes as polypetalous (see *Flora Indica*, ii.), though the fruit is certainly that of the *Myrsineæ*. Unfortunately, these species are very scarce, and in a bad state in herbaria; and besides, it is not easy to determine whether a corolla be really polypetalous or deeply divided: the best criterion, I believe, is, that distinct petals alone fall off separately, and so I observed them in our specimens; but might not broken lobes in the dry plant assume the same appearance? I hope Dr. Wallich will examine this point again in living specimens, although I expect my genus will remain in any case, as the two species have very much the same habit, and differ in that respect from all others.

The *Myrsineæ* have more or less a disposition to produce a resinous substance, which appears as dots or *reservoirs* in different parts of the plant, chiefly in the leaves, flowers and berries. It may be seen also in the hard wood of *Myrsine* and *Ægiceras*. That this matter is resinous I have little doubt, as I have ascertained that it melts and burns in the flame of a candle: it is not soluble in water, but is so in oil or in alcohol when moderately heated, giving to the latter a rose colour. I observed these facts with the berries of *Myrsine semiserrata*. The dots of *Myrsineæ* are dark or light brown, reddish, orange, or yellow; they vary in size, shape and position, in different species. I sup-

* *Prodr. Fl. Nov. Holl.*, p. 533.

pose the styptic taste of the fruit of *Embelia Ribes* to depend very much upon the quantity, and some peculiar quality, of this resinous substance.

Of 180 species of *Myrsineæ* (besides some that are doubtful), 58 are described for the first time in this paper. They grow commonly on the hilly and mountainous regions of the hottest parts of the globe. None have yet been found beyond the 39th or 40th degree of latitude, viz. in Japan, whilst they abound in Java, and in some parts of India and South America. Mr. Brown (Botany of Congo) remarks, that no species is known in Africa, except at the Cape, and on both sides of that continent, at the Canary Islands and Mauritius, Bourbon and Madagascar. This fact is still true; but as the *Myrsineæ* of hot countries grow chiefly in the mountains, it may happen that many may exist in the higher regions of Congo, Guinea, and Central Africa. The 180 species are distributed as follows: 112 in Asia and New Holland, 48 in America, and 20 in Africa. No species has been observed in two of these extensive divisions of the globe. But if we descend to regions so far limited, as that about 50 may be reckoned for the whole surface of the earth, of which only 43 or 44 have been more or less visited by travellers, we shall find that the genera and species of *Myrsineæ* are distributed as in the following Table.

In the Table, some species have been omitted on account of the difficulty of ascertaining their origin, and 14 are repeated twice or more, because they grow in more than one region. The most *sporadic* or *cosmopolite* species, *Ardisia humilis* of Vahl, is known already in six different regions, viz. Ceylon, Bengal, Nipal, the Birinese kingdom, Cochinchina and the Indian Archipelago. *Ægiceras fragrans* and *Mesa indica* extend also over four or five regions, which are nearly the same. *Myrsine Rapanea* is found in three regions of America, and ten other species in two regions, not far removed from each other, except in the case of *Myrsine africana*, which appears to grow both at the Cape and in the Azores.

Of 100 species of *Myrsineæ*, nearly 92 are limited to one region. This is a large proportion, as, looking to similar calculations which I have made upon more than 4000 species, founded upon the same distinction of regions, I find only in *Melastomaceæ* and *Myrtaceæ* a greater proportion of *endemic* species (98 per cent.). In *Anonaceæ* it is 90; in *Campanulaceæ*, 84; in the genus *Polygonum*, 76; in *Cruciferae*, 75; in *Papaveraceæ*, 60, &c.

REGIONS.	Egicera.	Wallenia.	Weigelia.	Conomorpha.	Cybianthus.	Myrsine.	Radula.	Oncostemum.	Artisia.	Enabelia.	Choripetalum.	Mussa.	Genus incert.	Total Number.
Canary Islands and Madera						1			1					2
Azores						1								1
Cape of Good Hope						4								4
Madagascar, Mauritius and Bourbon						1	7	2				1	4	15
Arabia												1		1
Ceylon and Indian Peninsula	1					1			3	2	1	1		9
Bengal	1					1			13	8	1	3		27
Nipal						6			6			4		16
Birmese Dominions and Martaban	1					1			10	3		4		19
Cochinchina						1			2					3
Indian Archipelago (Java, Penang, Singapore)	2					3			28	2		7	5	47
Philippine Islands									2					2
China and Japan									6					6
New Holland and New Zealand	1					4								5
United States of America						1								1
Mexico						1			4					5
Caribbee Islands		1				5			8					14
Venezuela						1			2					3
New Granada and Quito					1	1			3					5
Guiana			1			1			1			1		4
Banks of the Amazon				2										2
Bahia and Pernambuco						1								1
Rio Janeiro and Ilheos					3	1			2			1		7
Peru						8			1					9

In the following paper 58 species of *Myrsinæ* are described, which are either entirely new, or merely enumerated by name in Dr. Wallich's Catalogue. They increase by one third the number of species already known. Of such of the genera and species, to the descriptions already published of which I can add nothing, I merely give the names, and a reference to the authors who first described them. Their enumeration may be useful in showing the affinities of the new species with the old.

MYRSINÆÆ.

Ophiosperma. *Vent. Cels. p.* 86.

Myrsinæ. *Brown Prodr. p.* 533.

Ardisiaceæ. *Juss. Ann. du Mus. xv. p.* 349.

CHARACT. *Calyx* persistens, 5-4-lobus. *Corolla* gamopetala (vel rarius polypetala?) regularis, lobis vel petalis numero lorum calycis. *Stamina* tot quot lobi corollæ, eorum basi inserta, iisque opposita, inter se libera vel connata. *Pollen* ovoideo-globosum, læve. *Ovarium* liberum vel adhærens, 1-loculare, ovulis in placentâ centrali immersis. *Stylus* 1. *Drupa* vel *bacca* 1 vel polysperma. *Albumen* corneum, semini conforme, aut deficiens. *Cotyledones* breves. *Plumula* inconspicua vel brevissima.

VEGET. Arbores, frutices vel suffrutices, foliis alternis aut rarius suboppositis subverticillatis, simplicibus, integris vel dentatis, floribus axillaribus pedunculatis vel sessilibus, floratione indefinitâ centripetâ. Partes omnes materiâ resinosâ plus minusve donatæ, et ideo variis modis punctatæ et maculatæ. Pili simplices vel stellati, sæpius e cellulis pluribus constantes, nunc brevissimi, in pedunculis, calyce, et paginâ inferiori foliorum frequentiores, in quâque specie sitû formâ numeroque parum variantes.

HAB. Regiones calidiores, præcipue Asiæ et Americæ, usque ad 39um grad. lat. In sylvaticis montosis frequentiores.

AFFIN. Ordo medius inter Sapoteas, ubi Jacquinia propius sistit, et Primulaceas, ubi Samolus. A Sapoteis differt abortione verticilli staminum lobis corollæ alterni, a Primulaceis fructû indehiscente et habitû. Cum Rhamneis analogia tantum.

Tribus I. ÆGICERÆÆ.

CHAR. *Calyx* 5-partitus, foliolis oblique imbricatis. *Corolla* 5-fida. *Filamenta* basi connata. *Antheræ* liberæ, sagittatæ, loculis longitudinaliter dehiscentibus, parietibus transversis intersectis. *Ovarium* superum, polyspermum. *Stigma* simplex. *Drupa* elongata, cylindracea, follicularis, monosperma. *Albumen* 0. *Embryo* erectus.

VEGET. Habitus Sapotearum.

I. *ÆGICERAS*.

Ægiceras. *Gærtn. Kæn. Ann. of Bot.* i. p. 129. *Brown Prodr.* p. 534.

Species.

1. *Æ. FRAGRANS* *Kæn.* *Æ. majus* *Gærtn.* *Æ. obovatum* *Blum.* *Æ. floridum* *Rœm. et Schult.* In maritimis Novæ Hollandiæ (*Brown! Sieb.! n. 518.*), Moluccarum (*Rumph.*), Javæ (*Blum.*), regni Burinani (*Wall.!*), insulæ Penang (*Wall.!*), Deltæ Gangis (*Wall.!*), Malabariæ (*Kæn.*).
2. *Æ. FERREUM.* *Blum.*

Tribus II. *ARDISIEÆ*.

CHAR. *Calyx* 4-5-lobus. *Corolla* gamopetala. *Stamina* sæpius libera, loculis longitudinaliter aut apice dehiscentibus. *Ovarium* superum, polyspermum. *Drupa* seu *bacca* globosa, monosperma. *Albumen* corneum. *Embryo* transversus.

II. *WALLÉNIA*.

Wallenia. *Sw. Prodr.* i. p. 31.

CHAR. *Calyx* et *corolla* tubulosi, apice 4-lobi. *Stamina* 4, imæ basi corollæ inserta: *filamenta* inter se basi connata, superne libera et exserta: *antheræ* ovoideæ, filamentis multo breviores cito effætæ et horizontales, loculis longitudinaliter dehiscentibus. *Stylus* brevis. *Stigma* punctiforme.

VEGET. Arbusculæ, foliis alternis vel suboppositis subternatisve, oblongis, plus minusve obtusis, integris, coriaceis, glabris; paniculis terminalibus, nudis, multifloris; pedicellis apice pedunculorum subumbellatis. Lobi calycis et corollæ obtusi, æstivatione imbricatâ, in calyce tamen lobo uno exteriore, aliis vere imbricatis. Filamenta polline emisso accrescentia.

Species.

1. *W. LAURIFOLIA* (*Sw.! Prodr.* p. 31. *Fl. Ind. Occ.* i. p. 248. t. 6.), calyce et corollâ glanduloso-punctatis. In Jamaicâ (*Sw.!*), Hispaniolâ (*Sw., Bertero!*), et Cubâ (*De la Sagra! in herb. DeC.*).
2. *W. ANGULATA* (*Jacq. H. Schænbr.* t. 30.), pedunculis crassioribus, calyce et

corollâ impunctatâ. Culta in Hort. Mauritiî et inde Vindobonæ. Ex Indiâ Orient. dicitur, sed verisimilius ex Americâ.

III. WEIGELTIA.

CHAR. *Calyx* et *corolla* 4-partiti. *Stamina* 4, inæ basi corollæ inserta: *filamenta* libera, filiformia, lobis corollæ breviora: *antheræ* ovoideæ, filamentis multo breviores, horizontales, loculis longitudinaliter dehiscentibus. *Stylus* staminibus triplo brevior, acuminatus. *Bacca*

W. MYRIANTHOS (*Wallenia myrianthos* Reichenb. in *Weigelt. Plant. Exs. Surin.*).
h. Cirea Surinam.

Rami lignosi, glabri, cinerascetes. *Folia* obovata, plus minusve acuta, glabra, integra, subtns pallidiora, 3—5 poll. longa, $1\frac{1}{2}$ — $2\frac{1}{2}$ poll. lata, subpunctata, punctis pellueidis rubescentibus, oculo armato videndis. *Pedunculi* numerosi, alterni, in axillis foliorum, patentes, 2—4 poll. longi, subvelutini, bracteis alternis oblongis lineam longis, ramulis floriferis alternis. *Pedicelli* lineam longi, secundum pedunculos eorumque ramos alterni. *Lobi calycis* oblongi, obtusi, punctati, glabri, $\frac{1}{2}$ lin. longi. *Lobi corollæ* ovati, obtusi, calyce duplo longiores, glabri, albidi? ex rubro punctati.

Differt à Walleniâ inflorescentiâ; calyce et corollâ profunde divisâ, minime tubulosis; filamentis liberis, stylo staminibusque brevioribus. Flos omnino *Embeliæ*, præter numerum quaternarium.

Nuncupavi in honorem botanophili *Weigelt*, qui primus eam plantam legit.

IV. CONOMORPHA.

Walleniæ spec. *Mart. Nov. Gen.* iii. p. 89.

Conostylus. *Pohl in litt. ad DeC.*

CHAR. *Calyx* et *corolla* 4-fidi, infundibuliformes. *Stamina* 4, corollâ duplo breviora: *filamenta* ad superiorem partem tubi corollæ inserta, brevissima, libera: *antheræ* erectæ, ovoidco-triangulares, inclusæ, basi affixæ, loculis longitudinaliter dehiscentibus. *Ovarium* conicum (in floribus abortivis?) vel subglobosum (in fertilibus?). *Stylus* brevis. *Stigma* simplex. *Drupa* monosperma.

VEGET. Arbusculæ Americanæ; foliis alternis, integris, multipunctatis, coria-

ceis, magnitudine in eodem ramo variantibus. Racemi axillares, pedicellis alternis brevissimis axillis bracteolarum. Flores verosimiliter polygami ovario non semper accrescente.

Nomen mutavi propter *Conostylis* Br.

Species.

1. *C. OBLONGIFOLIA* (*Conostylus oblongifolius Pohl! ined.*), foliis oblongis, pedunculis petiolo brevioribus. In Brasiliâ (*Pohl in herb. DeC.*!).

Rami sublignosi, tenues, glabri. *Folia* oblonga vel obovata, 3—4 poll. longa, 12—15 lin. lata, obtusa vel acuta, in petiolos longos pollicares angustata, margine subrevoluta, superne nitida, subtus punctis crebris minimis nigricantibus insignia. *Pedunculi* vix pollicares, multiflori, simplices, vel a basi ramosi, glabri, crassiusculi. *Flores* alterni, subsessiles, $1\frac{1}{2}$ lin. longi. *Bractee* ovatae, obtusae, caducæ, glabræ, longitudine florum. *Lobi calycis* et *corollæ* ovato-acuti, glabri, subpunctati. *Corolla* calyce infundibuliformis, vix duplo longior, albida. *Filamenta* membranacea, tubo corollæ fere omnino connata, vel si velis ejus apice inserta. *Antheræ* subsessiles, luteæ, lobis corollæ breviores. *Stylus* corollâ dimidio brevior.

2. *C. LAXIFLORA*, foliis obovatis v. oblongis obtusiusculis versus basin cuneatis, racemis folio longitudine subæqualibus pendulis, bracteis lineari-lanceolatis acuminatis, laciniis calycinis triangularibus subciliatis, corollæ campanulatæ lobis apice reflexis. ½. Ad flumen Amazonum (*Mart.*). Wallenia laxiflora. *Mart, Nov. Gen.* iii. p. 89.

V. CYBIANTHUS.

Cybianthus. *Mart. Nov. Gen.* iii. p. 87.

CHAR. *Calyx* profunde 4-fidus. *Corolla* 4-fida, rotata, plana, ambitû fere quadrato, lobis uti calyx punctis atque lineis glandulosis immersis notata. *Stamina* 4: *filamenta* brevissima: *antheræ* subsessiles, oblongæ, erectæ, apice biporosæ. *Ovarium* superum, minutum (abortivum?), depressoglobosum. *Stigma* sessile, subcapitatum. *Ovula* an plura, erecta? *Drupa* monosperma?

VEGET. Arbusculæ Brasilienses, foliis sparsis versus ramorum extremitates

approximatis, petiolatis, glanduloso-tuberculatis; floribus parvis unibracteatis in racemis pendulis vel erectiusculis, axillaribus. Lobi corollæ et præcipue calycis fimbriato-pilosi.

Species.

1. *C. PENDULINUS* (*Mart. Nov. Gen.* iii. p. 87. *tab.* 236.), foliis oblongis utrinque acutis glabris, petiolis basi pilosis, racemis laxis pendulis folio subæqualibus pubescentibus, laciniis calycinis acutis. ʒ. In provinciâ Rio Negro Brasiliensium (*Mart.*).
2. *C. CUNEIFOLIUS* (*Mart. Nov. Gen.* iii. p. 88.), foliis late lanceolatis acutis versus basin longe cuneatis glabris, petiolis pilosis, racemis patentibus foliis triplo brevioribus pubescentibus, laciniis calycinis obtusiusculis. ʒ. Prope Sebastianopolim Brasiliensium (*Mart.*).
3. *C. PRINCIPIS*, foliis lanceolatis apice attenuatis et obtusiusculis, paniculis axillaribus et terminalibus folio brevioribus, pedunculis patentibus angulosis, floribus apice subfasciculatis, laciniis corollæ oblongis reflexis. Ad flumen Ilheos Brasilæ (*Princ. Neuwied.*). *Wallenia angustifolia. Nees et Mart. Beitr. zur Fl. Bras. in Nov. Act. Acad. Nat. Cur.* xi. p. 87.
4. *C. HUMBOLDTII*. *Ardisia tetrandra. Kunth in Humb. et Bonpl. Nov. Gen.* iii. p. 243.

VI. MYRSINE.

Sideroxylon, Scleroxylon, Samaræ, Rœmeriæ, Chrysophylli Auct. species.

Myrsine. Linn. Gen. ed. i. p. 54. *Juss. Gen.* p. 152. *Brown Prodr.* p. 533.

Rapanea. Aubl. Guian. i. p. 121.

Caballeria. Ruiz et Pav. Prodr. Fl. Peruv. p. 141.

Manglilla. Juss. Gen. Pers. Syn. i. p. 237.

Athrurophyllum. Lour. Fl. Cochinch. p. 148.

CHAR. *Calyx* et *corolla* 4-5-6-lobi. *Corollæ* lobi æstivatione imbricatâ. *Stamina* libera: *filamenta* brevissima, tubo corollæ inserta: *antheræ* sæpius subsessiles, erectæ, acutæ, loculis longitudinaliter dehiscentibus. *Ovarium* ovulis definitis 4—5 (ex Br.). *Stylus* brevis, post anthesin sæpe caducus. *Stigma* fimbriatum, vel lobatum, vel simplex. *Drupa* vel *bacca* pisiformis, monosperma.

VEGET. Arbores vel suffrutices, foliis alternis. Flores polygami vel hermaphroditi, sessiles vel brevipedicellati, fasciculati, fasciculis axillaribus bracteis imbricatis obtusis persistentibus plus minusve obtectis. Genus polymorphum, inflorescentiâ, melius quam characteribus, distinctum.

Species.

A. Stigma fimbriatum vel lobatum.

1. M. URVILLEI, glabra, foliis ovatis obtusis integris pellucido-punctatis, floribus subsessilibus fasciculatis 5-andris polygamis, lobis calycinis minimis dentiformibus, antheris sessilibus ovoideis. $\frac{1}{2}$. Circa sinum Tasman, in freto Cook, Novæ Zelandiæ (*D'Urvil. in h. DeC.*).

Rami lignosi, non crassi, in herbario nigricantes. *Folia* 1—2 poll. longa, 6—12 lin. lata, in petiolos breves angustata, obtusa et subemarginata, membranacea, pellucido-punctata, punctis luteis oculo armato videndis. *Fasciculi* pauciflori, pedicellis brevissimis, bracteis imbricatis minimis rotundatis subciliatis. *Calyx* vix perspicuus. *Corolla* 5-partita, lobis lanceolatis vix lineam longis glabris. *Antheræ* ovoideæ, crassæ, longitudine corollæ. Flores fœminei desunt. *Baccæ* vix lineam longæ, ovoideæ. *Semen* unum. *Albumen* corneum. *Embryo* transversus.

Lecta in navigatione navis *Astrolabe*, præfecto clar. D'Urville.

2. M. AFRICANA. *Ait.* Var. β . M. retusa. *Ait.*
3. M. BIFARIA. *Wall.!* in *Roxb. Fl. Ind.* ii. p. 296., *Catal. n.* 2294. M. Potama. *Don.*
4. M. SUBSPINOSA. *Don.*
5. M. SESSILIS. *Don.*
6. M. SEMISERRATA. *Wall.!* in *Roxb. Fl. Ind.* ii. p. 294., *Tent. Fl. Napal.* i. p. 34. *tab.* 24., *Catal. n.* 2295.
7. M. VARIABILIS. *Brown, Prodr.* p. 534. *Sieb.!* *Plant. Exsicc. Nov. Holl.* 262.
8. M. URCEOLATA. *Brown, ibid.*
9. M. CRASSIFOLIA. *Brown, ibid.*
10. M. EXCELSA. *Don.*
11. M. CAPITELLATA. *Wall.!* in *Roxb. Fl. Ind.* ii. p. 295., *Tent. Fl. Napal.* p. 35. *tab.* 25., *Catal. n.* 2296.

Var. β . parvifolia: foliis minoribus, capitulis paucifloris. *M. lanceolata*. *Wall.! Catal. n. 2297.*—*Hab.* in Sillet. Folia 2—3 poll. longa. Flores subsparsi.

12. *M. LUCIDA* (*Wall.! Catal. n. 2298.*), foliis lanceolatis integerrimis margine punctatis glabris, floribus lateralibus fasciculatis, lobis calycinis 5 subciliatis ovato-acutis. γ . In montibus Toongdong regni Burmanici (*Wall.!*).

Arbor parva (ex *Wall.*), ramis crassiusculis, irregulariter bullatis, uniformiter brunneis. Folia 4—5 poll. longa, 12—18 lin. lata, acuminata vel obtusiuscula, coriacea, superne glabra et nitida, margine revoluta et ibi subtus punctata, alibi punctis minimis quasi perforatis sub lente videndis tecta, nervo centrali distincto. Flores fasciculati, sessiles, inter bracteas ovatas obtusas ciliatas quorum vestigia solum vidi inserti. *Bacca* globosa, intense purpurea (ex *Wall.*). V. sicc.

Ex specimine nostro nimis truncato, differentiam nullam a *M. capitellatâ* perspicere valui; sed clar. Wallich in MSS. diversas esse affirmat.

13. *M. PORTERIANA* (*Wall.! Catal. n. 6525.*), glabra, foliis lanceolatis utrinque acutis integris, floribus sessilibus glomerulatis paucis, lobis calycinis 5 ovato-acutis ciliatis. γ . In Penang (*Porter!*).

Rami non crassi, ex albo maculati, extremitate foliosi. Folia $1\frac{1}{2}$ —2 poll. longa, 8—10 lin. lata, petiolis 3 lin. longis, glaberrima, subtus pallidiora et oculo armato depresso-punctata. Flores nondum aperti in specimine, 2—3 simul fasciculati, parvi. V. sicc.

14. *M. WIGHTIANA* (*Wall.! Catal. n. 2300.*), glabra, foliis oblango-lanceolatis acutis integris punctato-scabris, floribus paucis sessilibus, calyce 5-fido, lobis ovato-acutis subciliatis. γ . In Indiâ Orientali (*Wall.! ex Wight.*).

Fragmenta solum vidi. *Rami lignosi, duri*, ad originem foliorum florumque inflati et cicatrisedi. Folia extremitate ramorum approximata, 2—3 poll. longa, 6—12 lin. lata, obtusa vel sæpius acuta, petiolis 5 lin. longis, coriacea, punctis eminentibus crebris rotundis ubique sparsis. Flores fasciculati, sessiles, fasciculis paucifloris axillaribus, quorum vestigia solum vidi. *Bacca*

15. *M. LINEARIS*. *Poir. Dict. Suppl.* iii. p. 709. *Athrurophyllum lineare*. *Lour. Fl. Coch.* i. p. 148.
16. *M. MITIS*. *Spreng. Syst.* i. p. 663. *Sideroxylon mas inerme*. *Mill. Ic. tab.* 299.? *Sideroxylon mite*. *Linn. Syst.* p. 232. *Jacq. Coll.* ii. p. 249. *Scleroxylon mite*. *Willd.* An a sequente satis distincta?
17. *M. MELANOPHLEOS*. *Brown Prodr.* p. 533. *Sideroxylon melanophleum*. *Linn. Mant.* p. 48. *Jacq.! Hort. Vind.* i. tab. 71.
18. *M. SAMARA*. *Ræm. et Sch. Syst.* iv. p. 511. ex *Brown Prodr.* p. 533. *Samara pentandra*. *Ait.* An a *M. miti* diversa?
19. *M. AVENIS* (*Ardisia avenis Blum.*).
20. *M. MADAGASCARIENSIS*, foliis oblongis obtusis integris glabris coriaceis crassis subtus ex nigro punctatis, floribus fasciculatis, lobis calycinis 5 ovatis subciliatis, baccâ globosâ pedicellatâ. ½. In Madagascar (*Goudot in h. DeC.*!).

Rami lignosi, crassi, glabri, cicatrisati. *Folia* 2—4 poll. longa, 1—2 lata, obtusa vel emarginata, in petiolos angustata et cuneata, punctis minimis medio sub lente quasi depressis ubique adspersa. *Bractee* arcetè imbricatæ, parvæ, rotundatæ, glabræ. *Pedicelli* (post anthesin) 3 lin. longi. *Baccæ* 2 lin. longæ, stylo delapso.

21. *M. RAPANEA*. *Ræm. et Sch. Syst.* iv. p. 509. ex *Brown Prodr.* p. 533. *Rapanea guianensis*. *Aubl. Guian. tab.* 46. *Samara pentandra*. *Sw.* (non *Ait.*). *Caballeria coriacea*. *Meyer, Prim. Essequib.* p. 118. In Guianâ Gallicâ (*Aubl.*), insulâ Trinitatis (*Sieb.*!), et circa Bahiam (*Lhotsky! in h. DeC.*).
22. *M. CORIACEA*. *Ræm. et Sch.* ex *Brown Prodr.* p. 533. *Samara coriacea*. *Sw.!* In Jamaicâ (*Sw.*), Porto-Ricco (*Le Dru! in h. DeC.*), et Cubâ (*Sagra! in h. DeC.*).
23. *M. FLORIDANA*, glabra, foliis ovali-oblongis integris coriaceis subtus punctatis, fasciculis paucifloris, calyce 5-partito. ½. In Floridâ (*Mich.!* in *h. DeC.*).

Sideroxylon punctatum. *Lam. Ill. n.* 2460.? *Bumelia?* punctata. *Ræm. et Sch. Syst.* iv. p. 498?

Rami lignosi, non crassi, lenticellis ovatis albidis. *Folia* 2—3 poll. longa,

1—1½ poll. lata, obtusa vel subacuta, in petiolos 3 lin. longos angustata, superne nitida, subtus pallidiora et ubique punctulata. *Fasciculi* pauciflori sed numerosi. *Bracteae* ovatae, imbricatae, parvae, persistentes. *Baccæ* globosæ, lineam longæ, maculatae, pedicello vix lineam longo, lobis calycinis 5 dentiformibus glabris ½ lin. longis, stylo truncato crassiusculo.

Affinis *M. Manglillæ*, sed foliis potius oblongis brevius petiolatis, et *M. coriaceæ*, a quâ differt foliis majoribus, nunquam emarginatis, ovali-oblongis nec cuneato-oblongis, fructû valde maculato.

24. *M. MANGLILLA*. *Ræm. et Sch. ex Brown Prodr.* p. 533. *Sideroxylon Manglillo*. *Lam. Dict.* i. p. 245. *Manglilla*. *Juss. Gen.* p. 151. *Caballeria oblonga*. *Ruiz et Pav. Syst.* i. p. 280. Circa Limam (*Nees! in h. DeC.*).
25. *M. TRINITATIS*, foliis ellipticis utrinque acutis glabris integris subtus punctatis, fasciculis paucifloris, floribus pedicellatis minimis. *M. coriacea*. *Sieb.! Pl. Exsicc. Trinit.* n. 50 et 302. ½. In insulâ Trinitatis (*Sieb.! in h. DeC.*).

Rami lignosi, non crassi, glabri, extremitate ferruginei et subvelutini. *Folia* parva, 1—2 poll. longa, 6—10 lin. lata, in petiolos 4 lin. longos angustata, firma, subtus pallidiora et punctata, interdum lineis nigris maculata. *Pedicelli* lineam longi, glabri. *Calyx* 5-fidus, lobis minimis lanceolatis. *Lobi corollæ* ½ lin. longi, lanceolati. An flores in specimine nostro abortivi? V. sicc.

A *M. coriaced* differt foliis acutis, floribus minoribus glabris.

26. *M. SALICIFOLIA*, foliis ellipticis utrinque acutis integris, petiolis pilosis, fasciculis multifloris, lobis 5 calycis ciliatis, baccæ globosæ maculis oblongis. *Bumelia salicifolia*. *Bert. ined. in h. Balbis!* ½. In Guadaluppâ (*Bert.! in h. DeC.*).

Rami lignosi, non crassi, lenticellis minimis punctiformibus, apice subvelutini. *Folia* 1½—2 poll. longa, 6—10 lin. lata, in petiolum 4 lin. angustata, firma, subtus pallidiora et punctulata, petiolis et basibus nervorum centralium pilosiusculis. *Baccæ* fasciculatae, lineam longæ, pedicellis glabris 1½ lin. longis, lobis calycinis ovato-acutis, maculis luteis oblongis, stylo brevi persistente obtuso. V. sicc.

M. Trinitatis valde affinis; diversa tamen videtur foliis magis acutis paulo angustioribus, punctis minus eminentibus, petiolis sublongioribus et pilosis, calyce majore, aliisque forsân characteribus in flore adhuc ignoto.

27. *M. BERTERII*, ramis puberulis, foliis oblongo-lanceolatis subacutis integris superne glabris subtus et petiolo puberulis, floribus subsessilibus subvelutinis, lobis 5 corollæ et calycis obtusis. *Sideroxylon mastichodendron. Balb.! in h. DeC.* ♀. In Hispaniolâ (*Bert.! in h. Balb. et DeC.*).

Rami petiolique quasi pulvere tecti. *Folia* 2 poll. longa, 6—8 lin. lata, in petiolum 3—4 lin. longum angustata, superne nitida, subtus oculo armato puberula et punctata. *Flores* 4—5 simul glomerati, bracteis et calycibus puberulis, obtusis, minimis. *Corollæ 5-partitæ lobis* margine cinerascentibus. *Baccæ* globosæ, sessiles, lineam latæ, glabræ, maculis oblongis, stylo truncato terminatæ. V. sicc.

Species a præclaro et nimis infortunato Bertero detecta. *M. salicifoliæ* proxima, sed foliis paulo minoribus, minus acutis, subtus ut cum ramis petiolis floribusque puberulis.

28. *M. FERRUGINEA* (*Spreng. Syst. i. p. 664.*), foliis lanceolatis acutis integerimis coriaceis pilosiusculis, floribus fasciculatis brevipedicellatis hermaphroditis 5-andris, lobis calycis corollæque acutis, stigmate bilobo. *Caballeria ferruginea Ruiz et Pav. Syst. i. p. 280.* ♀. In montibus nemorosis Peruvix (*Ruiz et Pav.*).

Rami pilosiusculi. Folia utrinque acuta, $2\frac{1}{2}$ poll. longa, 1 poll. lata, petiolata, pilosiuscula, petiolo et nervo centrali rufo-velutinis, subtus ferruginea et punctata. *Flores* (an semper?) hermaphroditi. *Pedicelli* crassiusculi, lineam longi, bracteolis minimis basi circumdati! *Calyx* 5-fidus, glabriusculus. *Stylus* vix lineam longus, apice obscure bilobus. *Baccæ* valde maculatæ. V. sicc.

29. *M. RUFESCENS*, ramis et nervis foliorum velutinis rufescentibus, foliis oblongo-lanceolatis acutis integris longè petiolatis, floribus 4-andris, stigmate bilobo crassiusculo. ♀. In sylvaticis et fruticetis Corcovado, prope Rio Janeiro (*Lhotsky! in h. DeC.*).

Arbor 8—10-pedalis, ramis virgatis velutinis rubiginosis. *Folia* 2—3 poll. longa, 1—1½ lata, in petiolum 4 lin. long. attenuata, puberula, subtus pallidiora et punctulata. *Flores* sessiles, axillares, ad ramorum basin, fasciculati. *Calyx* 4-fidus, lobis minimis ovatis puberulis. *Corolla* ignota. *Baccæ* globosæ, vix lineam latæ, 1-spermæ, maculis elongatis crebris notatæ, glabræ, stylo caduco, ½ lin. longo. V. sicc.

30. M. LATIFOLIA. *Spreng.* Caballeria latifolia. *Ruiz et Pav. Syst.* i. p. 279.
31. M. PELLUCIDA. *Spreng.* Caballeria pellucida. *Ruiz et Pav., ibid.*
32. M. DENTATA. *Spreng.* Caballeria dentata. *Ruiz et Pav., ibid.* p. 281.
33. M. VENOSISSIMA. *Spreng.* Caballeria venosissima. *Ruiz et Pav., ibid.* p. 282.
34. M. DEPENDENS (*Spreng. Syst.* i. p. 664.), ramis dependentibus velutinis, foliis confertis late ellipticis retusis vel mucronulatis integris ciliatis superne nitidis subtus valde punctatis, floribus axillaribus solitariis vel geminis brevipedicellatis 4-andris, laciniis calycinis ovato-acutis, lobis corollæ oblongis calyce duplo longioribus. ½. In Pernviæ montibus editioribus (*Ruiz et Pav.*) et Silla de Caracas (*Humb. et Bonpl.*). Caballeria dependens. *Ruiz et Pav. Syst.* i. p. 281. Caballeria myrtifolia *h. Deless.!* ex *Ruiz et Pav.* Myrsine ciliata. *Kunth in Humb. et Bonpl. Nov. Gen.* iii. p. 248. tab. 245.

Folia 4—6 lin. longa, 3 lin. lata, approximata, brevipetiolata, coriacea, subtus pallidiora. *Calyx* 4-fidus, glabriusculus. *Corolla* 4-partita, lobis externe puberulis. *Stamina* lobis corollæ breviora, subsessilia (in specim. fors fœmineo). *Stylus* brevissimus. *Stigma* capitatum, inclusum. *Bacca* ovoideo-globosa, 2 lin. longa, ex nigro maculata. V. sicc.

35. M. POPAYANENSIS. *Kunth in Humb. et Bonpl. Nov. Gen.* iii. p. 249. Samara myricoides. *Ræm. et Sch. Mant.* iii. p. 294. (ex *Kunth in Linnæd.* 1830. p. 367.)

B. Stigma simplex.

36. M. ARDISIOIDES. *Kunth in Humb. et Bonpl. Nov. Gen.* iii. p. 249.
37. M. PENDULIFLORA (*Icon. Mexic. ined.*), glabra, foliis ovatis obtusiusculis in petiolum angustatis integris, umbellis axillaribus pendulis petiolis dimidio

brevioribus, dentibus 5 calycis ovato-acutis minimis, corollæ 5-partitæ lobis calyce triplo majoribus ovato-acutis, antheris lanceolatis sessilibus medio loborum corollæ insertis iisque brevioribus, stylo acuto? incluso, baccâ globosâ. ♀. In Mexico.

Folia pollicem longa, 5—6 lin. lata, petiolis 4 lin. longis. *Flores* nunc solitarii, nunc 2—5 simul congesti et umbellati. *Corolla* albo-rosea. *Stylus* in figurâ floris quasi truncatus obtusiusculus, in figura baccæ subulatus.

38. *M. CANARIENSIS* (*Spreng. Syst. i. p. 663.*), foliis ovali-oblongis obtusiusculis subsessilibus amplis glabris coriaceis integris, floribus axillaribus fasciculatis sessilibus, calyce 5—6-dentato, corollæ 5—6-fidæ lobis lineari-lanceolatis, staminibus inclusis medio corollæ insertis, antheris acutis, stylo incluso acuminato. ♀. In Teneriffâ (*Willd. Chr. Smith!*) *Scleroxylon canariense*. *Willd. Mag. Berl. Naturf. Freund. iii. p. 59.* *Manglilla canariensis*. *Ræm. et Sch. Syst. iv. p. 505.*

Rami crassi, glabri, albo maculati. *Folia* 4—6 poll. longa, 2—4 poll. lata. *Inflorescentia* generis, glomerulis 3—8-floris, bracteis imbricatis glabris rotundatis. *Lobi calycis* ovati, obtusi, subciliati. *Corolla* calyce quadruplo longior. *Stigma* in alabastro acuminatum. *Bacca* globosa.—Variat foliis plus minusve pellucido-punctatis, punctis rotundis seu oblongis. V. sicc.

39. *M. PACHYSANDRA* (*Wall.! in Roxb. Fl. Ind. ii. p. 297., Catal. n. 2284.*), ramis velutinis, foliis lanceolatis acuminatis integris punctatis superne glabris subtus pilosiusculis nervis lateralibus arcuatis, floribus fasciculatis pedicellatis hermaphroditis, lobis 5 calycis ovatis ciliatis, corollæ 5-partitæ lobis reflexis, antheris magnis triangularibus in præfloratione connatis, stylo acuminato. ♀. In insulâ Penang (*Porter*), et Singapore (*Wall.!*).

Species anomala, punctis foliorum et flore *Ardisia* potius quam *Myrsine*, sed inflorescentiâ ultimi generis. Alabastrum spiraliter contortum, æstivatione imbricatâ. Fors genus novum?

Species ignotæ et dubiæ.

40. *M. SCABRA*. *Gærtn. Fruct. i. p. 282.*

41. M. LÆTA. Samara læta. *Sw. Prodr.* p. 151. (non *Lin.*).
 42. M. MYRTIFOLIA. Samara myrtifolia. *Willd. MSS. in Ræm. et Sch. Mant.* iii. p. 220. Clar. Kunth ignota (*Linnaea*, 1830. p. 367.) quamvis ex itinere Humboldtiano. An Caballeria dependens *Ruiz et Pav.* (Myrsine dependens *Spreng.*) quæ in b. Deless. sub nomine *Caball. myrtifoliae* adest?
 43. M. SALIGNA. Samara saligna. *Willd. MSS. in Ræm. et Sch. Mant.* iii. p. 220. Clar. Kunth ignota. Vid. *Linnaea*, 1830. p. 367.

VII. BADULA.

Barthesia. *Commers. in h. Mus. Par.*

Badula. *Juss. Gen.* p. 420. (excl. syn. Burin. Zeylan.).

Anguillaræ spec. *Lam. Ill.*

Myrsine spec. *Ræm. et Sch.*

CHAR. *Calyx* 5-lobus. *Corolla* 5-fida. *Stamina* 5, corollâ breviora: *antheræ* subsessiles acutæ, liberæ, biloculares, loculis rimâ longitudinali dehiscentibus. *Stylus* staminibus brevior. *Stigma* crassum capitatum vel obscure lobatum. *Bacca* globosa.

VEGET. Arbores vel frutices, foliis alternis integris punctatis, inflorescentiâ Ardisiarum, nempe pedicellis extremitate pedunculorum approximatis vel umbellulatis.

PATRIA. Insulæ Mauritiî et Borboniæ.

Species.

1. B. MICRANTHA, pedunculis velutinis, foliis late oblongis obtusis glabris paniculis terminalibus pyramidalis foliis longioribus multifloris floribus velutinis minimis, alabastris globosis. ♀. In Borboniâ vel Mauritio (*h. DeC.!* ex *h. Mus. Par.*).

Rami cortice rugoso, lenticellis oblongis crassis, junioribus pedunculis et pedicellis subvelutinis. *Folia* $1\frac{1}{2}$ —2 poll. longa, 10—15 lin. lata, in petiolos 4 lin. longos marginatos sæpe denticulatos angustata, ubique punctata, punctis pellucidis rubescentibus. *Panicula* plus minusve elongata, pedunculis et pedicellis alternis, bracteis subulatis pedicellis lineam longis vix longioribus caducis. *Lobi calycis* acuti, minimi. *Alabastra* velutina,

$\frac{1}{2}$ lin. lata. *Lobi corollæ* ovati, obtusi, æstivatione subimbricatâ. *Antheræ* subscissiles, acutiusculæ, lobis corollæ breviores, erectæ. *Ovarium* ovoideum. *Stylus* brevissimus. *Stigma* obtusum. *Pistillum* totum corollâ duplo triplove brevius. V. sicc.

2. B. BARTHESIA, foliis lanceolatis subacutis basi longe angustatis glabris tenuibus punctulatis, pedunculis racemosis multifloris folio subbrevioribus, lobis calycinis obtusis ciliatis, antheris acutis, stigmatibus capitato obscure lobato. η . In Mauritio (*h. DeC.! ex h. Mus. Par.*). *Barthesia*. *Commers.! in h. Mus. Par.* *Badula*. *Juss. Gen. p. 240.* *Anguillaria Barthesia*. *Lam. Ill. n. 2742.* *Myrsine Barthesia*. *Rœm. et Sch. Syst. iv. p. 507.*

Rami cortice flavido. *Folia* semipedalia, 2—2 $\frac{1}{2}$ poll. lata, punctis parvis sparsis rubescentibus. *Pedunculi* numerosi, axillares, paniculam semipedalem præbentes, glabriusculi, rigidi; *pedicellis* alternis 3 lin. longis. *Calyx* vix lineam longus. *Corolla* 5-fida, alba (ex *Poir.*), lobis obtusis calyce duplo longioribus. *Antheræ* subsessiles. *Ovarium* globosum. *Stylus* staminibus brevior. *Stigma* subtrilobum. Vulgo *Bois de Pintade*. V. sicc.

3. B. INSULARIS, glabra, foliis ovatis obtusis coriaceis, pedunculis folio brevioribus, *pedicellis* alternis, calyce 5-partito, alabastris ovoideis, stigmatibus obtusis. η . In Borboniâ aut Mauritio (*h. DeC.! ex h. Mus. Par.*).

Rami non crassi, ferruginei. *Folia* 1—3 poll. longa, 6—15 lin. lata, in petiolo 3 lin. longos crassos angustata, nervis in herbario pulchre reticulatis. *Pedunculi* prope extremitatem ramorum axillares, foliis fere dimidio breviores; crassiusculi, velutini, ramulis eorum alternis brevibus, *pedicellis* lineam longis basi articulatis, bracteis minimis caducis. *Lobi calycis* patentes, acuti, subciliati, vix lineam longi. *Alabastrum* glabrum, lineam longum, obtusiusculum. *Antheræ* filamentis longiores. *Ovarium* ovoideum. *Stylus* brevissimus, obtusus, antheris in alabastro brevior. V. sicc.

4. B. SIEBERI (tab. 5.), foliis obovatis obtusis petiolatis pellucido-punctatis glabris, pedunculis axillaribus foliis quadruplo brevioribus 4—8-floris, alabastris obtusis, lobis calycinis ovato-acutis subciliatis, antheris cuspidatis. η . In Mauritio. *Ardisia latifolia*. *Sieb.! Fl. Maurit. xi. p. 53.* (non *Rœm. et Sch.*).

Rami crassi. *Folia* 3—4 poll. longa, 1—1½ poll. lata, petiolis 3—5 lin. longis, oculo armato punctis adspersa crebris sæpius pellucidis nonnunquam rubris, extremitate ramorum approximata. *Pedunculi* axillares, versus apicem ramorum, 1—2 poll. longi, velutini; pedicelli alterni et subumbellati, 2—3 lin. longi. *Bractee* ovato-acutæ, semilineares, caducæ. *Corolla* 5-fida, calyce duplo longior, punctata, patens, lobis obtusis, lineam longis. *Stamina* corollâ duplo breviora, hastata; antheris filamento duplo longioribus. *Ovarium* superum, ovoideum. *Stylus* staminibus duplo triplo brevior. *Stigma* peltatum aut subbilobum.—Specimen delineatum in herb. Mus. Paris. erat, sub nomine *Celastræ*. *Pedunculi* crebriores quam in aliis paniculam quamdam inter folia præbent.

5. *B. OVALIFOLIA*, glabra, foliis ovalibus utrinque acutis membranaceis ex nigro punctatis, pedunculis foliis triplo brevioribus, alabastris ovoideis valde punctatis, antheris subsessilibus, stylo brevi obtuso. ♀. In Borboniâ vel Mauritio (*h. DeC. ex h. Mus. Par.*).

Rami crassi. *Folia* 3—6 poll. longa, 2—3 lata, regulariter ovalia, utrinque angustata, tenuia, in herbario viridia, punctis oculo nudo perspicuis margine crebrioribus. *Pedunculi* ut flores punctati et maculati, 2—3 poll. longi, racemosi. *Flores* non parvi, laciniis calycinis minimis acutis; lobis corollæ ovato-acutis. *Antheræ* acutiusculæ. *Ovarium* ovoideum. *Stylus* staminibus brevior, obtusissimus, an demum lobatus? V. sicc.

6. *B. CRASSA*, glabra, ramis crassis, foliis ellipticis vel oblongis obtusis coriaceis, pedunculis folio brevioribus, pedicellis alternis brevibus. ♀. In Borboniâ aut Mauritio (*h. DeC. ex h. Mus. Par.*).

Rami lignosi, cicatricibus latis. *Folia* 3—5 poll. longa, 1½—2 poll. lata, plus minusve obtusa, in petiolos 3—4 lin. angustata, oblonga vel elliptica, sub lente punctulata, punctis quasi medio perforatis ut in *Myrsinibus*. *Pedunculi* crassi, patentes, axillares, extremitate rami approximati. *Pedicelli* 1½ lin. longi, crassi, basi articulati, bracteis caducis. *Calyx* (in baccâ) obscure lobatus, lobis ½ lin. longis obtusis? *Bacca* globosa, 2 lin. longa, substriata, stylo truncato brevi terminata. V. sicc.

7. *B. ANGUSTIFOLIA*, foliis lanceolatis utrinque acutis subintegris punctatis gla-

herrimis, pedunculis velutinis rigidis axillaribus foliis sublongioribus.
 15. In excelsioribus Borboniæ (*Bory!* in *h. DeC.*).

Rami rigidi, tenues, ferruginei, glabri. *Folia* 12—15 lin. longa, 4—6 lin. lata, firma, superne nitida, integra vel uno latere versus extremitatem irregulariter dentata, petiolis 2—3 lin. longis tennibus, punctis nigricantibus crebris ubique sparsis. *Pedicelli* alterni, lineam longi, ut pedunculi velutini, angulo recto divergentes, supra originem post anthesin rupti, ita ut pedunculi angulosi vel quasi nodosi demum sint. *Calycis* 5-fidi lobi pilosiusculi, acuti. *Baccæ* gobosæ, lineam latæ, ex nigro maculatæ, stylo persistente obtuso terminatæ.—Species habitû a præcedentibus diversa, ad *Ardisias americanas* potius accedens.

VIII. ONCOSTEMUM.

Oncostemum. *Adr. Juss. Nouv. Ann. du Mus.* i. p. 133. *tab.* 11. *Calyx* et *corolla* 5-fidi. *Stamina* connata in massam ovoideam cylindricamve, basi cum tubo corollæ coalitam, apice 5-dentatam. *Ovarium* superum. *Stylus* simplex. *Stigma* subinfundibuliforme, subintegrum, denticulatumve, etc.

Frutices Madagascarienses, habitû *Ardisiarum* et *Badularum*. Species 2.

IX. ARDISIA.

Ardisia. *Sw. Prodr.* p. 48. *Brown, Prodr.* p. 533. *Roxb. Fl. Ind.* ii. p. 268.

Anguillaria. *Gartn.* i. p. 372.

Bladhia. *Thunb. Fl. Jap.* p. 7.

Pyrgus. *Lour. Fl. Coch.* p. 149.

CHAR. *Calyx* 5-fidus. *Corolla* 5-fida, lobis æstivatione imbricatâ. *Stamina* 5: *filamenta* libera: *antheræ* liberæ vel (rarius) connatæ, longitudine filamentis æquales vel majores, erectæ, triangulares, acutæ vel acuminatæ, loculis rimâ longitudinali dehiscentes. *Ovarium* subglobosum. *Stylus* filiformis, staminibus longior, persistens. *Stigma* simplex, subulatum vel punctiforme. *Ovula* (ex Brown) 5, vel magis. *Bacca* globosa.

VEGET. Arbores, frutices, vel suffrutices vix lignosi; foliis alternis, rarius suboppositis subternisve, punctatis; floribus plus minusve paniculatis, pani-

culis nunc multifloris extremitate ramorum foliis longioribus, nunc paucifloris axillis foliorum, pedicellis apice pedunculorum subumbellatis. Flores majores quam in Myrsinibus, semper hermaphroditi, albi vel rosei, sæpe punctati.

Sectio 1. *Ardisiæ veræ.*

Antheræ liberæ, filamentis longiores. *Stylus* subulatus staminibus longior.
Bracteæ pedicellis multo breviores.

§ 1. Folia integra.

* Folia glabra.

1. *A. ACUMINATA*. Willd. Icacorea guianensis. *Aubl. tab.* 368.

2. *A. TINIFOLIA*. Sw.

3. *A. LAURIFOLIA*. Lam. *A. latifolia* (errore typogr.). *Rœm. et Sch.*

4. *A. MACULATA* (*Poiteau!* in *h. DeC.*), foliis oblongis obtusis coriaceis, paniculâ terminali ramosâ multiflorâ pyramidali, lobis calycinis ovalibus obtusis amplis, baccâ maculatâ. ʒ. In Hispaniolâ (*Poiteau*). *A. dominicensis h. Willd.?* *Rœm. et Sch. Syst.* iv. p. 803?

Rami lignosi, crassi. *Folia* 2—2½ poll. longa, 12—15 lin. lata, valde coriacea, glaberrima, non proprie punctata sed subtus quodammodo bullata seu aspera. *Pedunculi* et *pedicelli* glabri, articulati, crassi. *Lobi calycis* 2 lin. longi, glabri, imbricati. *Bacca* 2 lin. lata. V. sicc.

5. *A. CAPOLLINA* (*Icon. Mexic. ined.*), foliis lanceolatis utrinque acutis nitidis, paniculâ terminali foliis longiore compositâ, pedunculis alternis, pedicellis umbellatis, lobis corollæ ovatis acutis reflexis calyce quadruplo longioribus. ʒ. In Mexico.

Bracteæ caducæ, pedicellis multo breviores. *Alabastra* ovoidea, acuta. *Calyx* et *corolla* 5-fidi. *Antheræ* erectæ, acuminatæ. *Stylus* exsertus, subulatus. *Baccæ* globosæ, colore vinoso. *Flores* albo-rosei. Vulgò *Capollin*.

6. *A. REVOLUTA*. Kunth, in *Humb. et Bonpl. Nov. Gen. Schlecht. et Cham. in Linnæd.* 1830. p. 125.

7. *A. COMPRESSA*. Kunth, in *Humb. et Bonpl. Nov. Gen.* iii.

8. *A. MICRANTHA*. Kunth, *ibid.*

9. *A. ORINOCENSIS*. Kunth, *ibid*.
10. *A. FERRUGINEA*. Kunth, *ibid*.
11. *A. THYRSIFLORA*. Don, *Prodr*.
12. *A. PURPUREA*. Blume, *Bijtr. tot Fl. Nederl. Ind.* p. 684.
13. *A. MUCRONATA*. Blume, *ibid*.
14. *A. SANGUINOLENTA*. Blume, *ibid.* non Wall.
15. *A. ROTHII*. *A. pyramidalis*. Roth, *Nov. Pl. Sp.* p. 123. (*excl. syn. Cavan.*).
Ab *A. pyramidalis* Cavan. differt foliis integerrimis.—*Hab.* in Indiâ Orient.
(Roth *ex h. Heyn.*). Forsan una ex Ardisiis clar. Wallich.
16. *A. PYRGUS*. Ræm. et Sch. *ex auctor. Brown.* *Pyrgus racemosa*. Lour.
17. *A. LANCEOLATA*. Roxb. *Fl. Ind.* ii. p. 270. Wall.! *Catal. n.* 2292.
18. *A. PANICULATA*. Roxb. *Fl. Ind.* ii. p. 270. Wall.! *ibid. et Catal. n.* 2268.
Bot. Reg. tab. 638. *A. Doca*. Herb. Hamilt.!—In Bengaliâ Septentr. ad
Orient., circa Sillet (Wall.), et Rangamati (Hamilt.).
19. *A. ANCEPS*. Wall.! in Roxb. *Fl. Ind.* ii. p. 280., *Catal. n.* 2261.
20. *A. COMPLANATA*. Wall. *ibid.*, *Catal. n.* 2277. *A. polycarpa*. Wall.! *Catal.*
n. 2285. ♀. In ins. Penang (Wall.! *ex Porter*), et circa Chappedong,
orâ Tennasserim (Wall.!). Flores minores quam in præcedente, rami
minus compressi, folia breviora minus angustata, pedunculi tandem mi-
nus divaricati.
21. *A. FLORIBUNDA*. Wall.! in Roxb. *Fl. Ind.* ii. p. 272. *Catal. n.* 2263.
22. *A. BLUMII*. *A. anceps*. Blume, *Bijtr. tot Fl. Nederl. Ind.* p. 685. non
Wall.
23. *A. SCANDENS*. Blume, *ibid.* p. 686.
24. *A. MISSIONIS* (Wall.! *Catal. n.* 6524. *ex h. Madras.*), glabra, foliis oblongo-
lanceolatis, paniculâ terminali laxâ longitudine foliorum, lobis calycinis
ovato-acutis. ♀. In Indiâ Orientali.

Folia extremitate ramorum approximata, 4—5 poll. longa, $1\frac{1}{2}$ lata, basi longe angustata, punctis ubique sparsis sed lente solum perspicuis et paginâ inferiori quasi medio perforatis. *Pedunculi* axillares, remotiusculi, bracteis caducis nudi, 3—6-flori, subpaniculati. *Pedicelli* 3—6 lin. longi. *Lobi calycis* subulati. *Corollæ* profunde 5-fidæ lobi lanceolati acuminati. *Antheræ* subsessiles, longitudine corollæ, acuminatæ. *Stylus* subulatus, staminibus sublongior. V. sicca.

25. *A. HUMILIS*. *Vahl, Symb.* p. 40. *Blume, Bijtr.* p. 687. *Wall.! Catal.* n. 2283, *F. et M.* *A. solanacea*. *Roxb.! Plant. Corom.* i. p. 27. *tab. 27. Sims in Bot. Mag. tab. 1677. Wall.! Catal.* n. 2283. *A. littoralis*. *Andr. Bot. Rep.* 630. *A. Doma*. *Wall. Catal.* n. 2283, *B. ex h. Hamilt.!* *A. oleracea*. *Ibid. G.* *A. umbellata*. *Roxb. Fl. Ind.* ii. p. 273. *Lodd. Bot. Cab. tab. 531. Wall.!* *Catal.*, 2283, *H. ex h. Hamilt.!* *A. nana*. *Ibid.*, *L.*

Var. β .: foliis magis acutis membranaceis, nervis prominulis, pedunculis et pedicellis elongatis paucifloris. *A. solanacea*. *Wall.! Catal.* 2283, *A. et K.*

Var. γ .: floribus maximis, bracteis amplioribus. *A. grandiflora*. *Wall.!* *Catal.* n. 2372.

Var. δ .: foliis majoribus utrinque nitidis. *A. Wightiana*. *Wall.!* *Catal.* n. 2330.

$\mathfrak{h}$. In Zeylonâ (*Burm.*), Coromandeliâ (*Roxb.*), Nepaliâ (*Wall.*), Bengaliâ (*Roxb.!*), insulâ Penang (*Wall. in Roxb. Fl. Ind.*), Martabaniâ (*Wall.!*), insulâ Haynan (*Dahl ex Vahl*), Sumatrâ (*Roxb.*), Javâ (*Blume*).— β . in montibus Sillet; γ . in mont. dietis Nilghiry.

26. *A. LURIDA*. *Blume, Bijtr.* p. 688. An a præcedente diversa?

27. *A. PEDUNCULOSA*. *Wall.!* in *Roxb. Fl. Ind.* ii. p. 270. *Catal.* 2271.

28. *A. NERIIFOLIA* (*Wall.!* *Catal.* n. 2278.), foliis oblongis acuminatis longe petiolatis nervis parum distinctis, paniculis laxis terminalibus laterali-
busque folio brevioribus, pedunculis et pedicellis subvelutinis, laciniis calycinis minimis acutis ciliatis, lobis corollæ ovato-acuminatis, stylo exserto, antheris cuspidatis subsessilibus. *Tab. 8.* $\mathfrak{h}$. In Sillet (*Wall.!*).

Var. β . *montana*, foliis oblongo-lanceolatis longe acuminatis, pedicellis brevioribus, laciniis calycinis latioribus, alabastris minus acuminatis. *A. neriifolia?* β . *Wall.!* *Catal.* n. 2278. In montibus Sillet (*De Silva!*).

In var. α . pedunculi nonnunquam elongati et cirrhusi.

29. *A. DIVERGENS*. *Roxb.!* *Fl. Ind.* ii. p. 275. *Wall.!* *ibid. Catal.* n. 2269. *A. punctata*. *Jack ined. ex Wall.* $\mathfrak{h}$. In Moluccis (*Roxb.*), et ins. Penang (*Wall.!*).

30. *A. POLYCEPHALA* (*Wall.!* *Catal.* n. 2293.), glabra, foliis oblongis acutis amplis margine inæqualiter subtus revolutis, pedunculis ad apicem ramorum numerosis multifloris foliis duplo brevioribus compressis, floribus

dense racemosis, lobis calycinis obtusis, alabastris acutis, stylo incluso.
 ♀. Ad ripas fluminis Atran (*Wall.!*).

Folia 5—7 poll. longa, $1\frac{1}{2}$ — $2\frac{1}{2}$ poll. lata, coriacea, petiolis 4—5 lin. longis. *Pedunculi* axillares versus apicem ramorum; *pedicelli* semipollicares incurvati extremitate pedunculorum approximati. *Flores* 3 lin. longi. *Lobi calycis* obtusiusculi, corollæ acuminati. *Antheræ* subsessiles, acutæ. *Baccæ* globosæ, 2 lin. latæ, in herbario nigræ, striatæ. V. sicc.

31. *A. TUBERCULATA* (*Wall.!* *Catal. n.* 2274.), foliis ovato-acuminatis coriaceis ubique punctatis, racemis axillaribus et terminalibus multifloris folio brevioribus, pedunculis subcompressis glabris, laciniis calycinis ovato-acutis subciliatis. ♀. In Singapore (*Wall.!*).

Rami superne angulato-compressi. *Folia* 2—4 poll. longa, 8—12 lin. lata, in petiolos 3—4 lin. longos basi angustata, acuminata, nervo centrali distincto, lateralibus vix perspicuis, utrinque et ubique (ut pedunculi) resinoso-punctata. *Pedunculi* valde divergentes; *pedicelli* basi articulati umbellulati. *Flores* parvi. *Calycis lobi* acuti, $\frac{1}{3}$ lin. longi. *Alabastra* acuta, lobis calycinis duplo longiora. V. sicc.

32. *A. ATTENUATA* (*Wall.!* *Catal. n.* 2286, partim), foliis oblongo-lanceolatis utrinque acuminatis margine magis punctatis, pedunculis axillaribus elongatis, floribus racemosis, pedicellis pedunculisque glabris, lobis calycinis ovato-acutis subciliatis. ♀. Circa Tavoy, olim Burmanorum (*Wall.!* ex *Gomez*).

Ut monet cl. Wallich duæ latent species sub numero 2286, una *A. oblonga* (*n.* 45.), altera hîc descripta, cujus folia majora, 5—8 poll. longa, 15—20 lin. lata, glaberrima, nervis subtus eminentibus, basi in petiolum semipollicarem angustata. *Pedunculi* fructiferi 3—4 poll. longi, nudi; *pedicelli* pollicares, erectiusculi, apice paulo incrassati. *Lobi calycis* sesquilineam longi, latiusculi. *Baccæ* globosæ, 2 lin. latæ, glabriusculæ. V. sicc.

33. *A. ELLIPTICA*. *Thunb. Nov. Gen. pars viii. Upsal.* 1795 (ex *Ræm. et Sch.*).
 34. *A. OXYPHYLLA* (*Wall.!* *Catal. n.* 2291.), glabra, foliis ellipticis utrinque acutis margine magis punctatis, pedunculis terminalibus et axillaribus folio brevioribus, pedicellis laxè umbellatis, laciniis calycinis ovatis

subciliatis, lobis corollæ lanceolatis, stylo inclusio. h. In ins. Penang (*Wall.!*).

Rami divergentes, lignosi. *Folia* 4—5 poll. longa, 15—48 lin. lata, regulariter elliptica, in petiolos 4—6 lin. longos angustata, rigidula, nitida, nervis lateralibus parallelis striata. *Inflorescentia* fere *A. humilis*, floribus tamen minoribus et minus numerosis. *Pedunculi* pollicares; *pedicelli* 4—8 lin. longi. *Baccæ* globosæ, 3 lin. longæ. V. sicc.

35. *A. EUGENIÆFOLIA* (*Wall.!* *Catal. n.* 2276.), foliis oblongo-lanceolatis basi acutis apice acuminatis coriaceis nervis crassis arcuatis prope marginem, pedunculis axillaribus brevibus paniculatis multifloris foliis multo brevioribus, pedicellis et calyce velutinis, laciniis calycis et corollæ ovato-acutis, stylo exserto. h. In montibus Sillet (*Wall.!* ex *De Silva*).

Folia 3—6 poll. longa, 1—2 poll. lata, longe acuminata, in petiolos 3—4 lin. longos basi angustata, ubique punctata, nervis ut in *A. divergente*. *Paniculæ* axillares, multifloræ. *Corolla* calyce tripla, subcampanulata. *Antheræ* subsessiles, connectivo acuminato. V. sicc.

36. *A. ARBORESCENS* (*Wall.!* *Catal. n.* 2289.), glabra, foliis oblongo-lanceolatis acutis coriaceis, pedunculis axillaribus elongatis rigidis, paniculis laxis foliis brevioribus, pedicellis longis, lobis calycinis ovato-acutis. h. In montibus Taong-Dong dictis, regni Burmanici (*Wall.!*).

Rami crassi, veteriores cinerascens cicutrisati et tuberculati, juniores læves. *Folia* 5—7 poll. longa, 1½—2 poll. lata, plus minusve acuta, valde coriacea, nervis lateralibus parum eminentibus, petiolo semipollicari, punctis parum distinctis. *Pedunculi* 3—4 poll. longi, erecti, sæpe compressi, læves. *Pedicelli* pollicares. *Lobi calycini* (post anthesin) ampli, 2 lin. longi. *Baccæ* globosæ, 3 lin. latæ. V. sicc.

37. *A. AMHERSTIANA*, foliis oblongis acutis, pedunculis terminalibus pedicellis-que velutinis, floribus umbellulatis, laciniis calycinis ovatis obtusis ciliatis et dorso velutinis, lobis corollæ profunde partitæ ovato-acutis, stylo inclusio. h. Prope urbem Amherst, provinciæ Martabanæ, olim Burmanorum (*Wall.!*). *A. reflexa*. *Wall.!* *Catal. n.* 2282, partim.

Arbuscula ramis apice sericeo-velutinis fulvisque. *Folia* 6—8 poll. longa, $1\frac{1}{2}$ —2 poll. lata. *Pedunculi* 2, in specimine, subterminales, sesquipollicares. *Flores* numerosi, umbellati. *Alabastra* ovoidea, acuta, 3 lin. longa.

Mixta in herbario ampl. cœtus Indiæ Orientalis cum aliâ specie (*A. reflexa*, n. 47.) cujus habitum et inflorescentiam habet, sed a quâ differt foliis basi paulo magis angustatis, glaberrimis, pedunculis pedicellis et calyce velutinis cinerascentibus, nec dense hispidis, laciniis calycinis latioribus obtusis.

38. *A. PAUCIFLORA*. *Herb. Heyn.! Roxb. Fl. Ind.* ii. p. 279. *Wall.! Catal.* n. 2270.

39. *A. TENUIFLORA*. *Blume, Bijtr. tot Fl. Nederl. Ind.* p. 686.

40. *A. NUTANS*. *Nob. A. punctata. Blume, ibid.* p. 687. non *Lindl.*

41. *A. MARGINATA*. *Blume, ibid.* p. 688.

42. *A. LÆVIGATA*. *Blume, ibid.* p. 690.

43. *A. OBOVATA*. *Blume, ibid.* p. 688.

44. *A. CYMOsa*. *Blume, ibid.* p. 689.

45. *A. OBLONGA*, foliis oblongis acuminatis punctatis, pedunculis multo foliis brevioribus subterminalibus, pedicellis umbellatis paucifloris ut pedunculi glabris, lobis calycinis ovatis obtusis subciliatis. Circa Tavoy (*Wall.! ex Gomez*). *A. attenuata. Wall.! Catal.* n. 2286, partim: vid. supra, n. 32.

Folia 4—5 poll. longa, 12—18 lin. lata, in petiolum 4—5 lin. longum angustata, glaberrima, nervis in herbario bene distinctis, superne nitida, punctis crebris minimis. *Pedunculi* 6—8 lin. longi; *pedicelli* 3—5 lin. apice paulo incrassati, sæpe reflexi. *Calycis lobi* glanduloso-ciliati, $\frac{1}{2}$ lin. longi. *Alabastra* acuta. *Baccæ* globosæ, $2\frac{1}{2}$ lin. latæ, glabriusculæ. V. sicc.

46. *A. OXYANTHA* (*Wall.! Catal.* n. 2275.), foliis lanceolatis utrinque acuminatis tenuibus, floribus axillaribus paucis, pedunculis unifloris filiformibus petiolo subæqualibus, laciniis calycinis lanceolatis subulatis subciliatis, corollæ lobis elongatis valde acuminatis. *h. In montibus Sillet (Wall.! ex De Silva).*

Folia 3—4 poll. longa, $1-1\frac{1}{2}$ poll. lata, in herbario viridia, ubique punctata, in petiolos 3 lin. longos angustata, nervis subtus prominulis. *Pedicelli* graciles, 3—4 lin. longi, glabri, uniflori, e bracteis imbricatis subulatis minimis subvelutinis axillis foliorum superiorum nascentes, pauci, fragiles, ideo sæpius solitarii. *Alabastra* valde acuminata. *Stamina* 5, filamentis

brevissimis, antheris acuminatis liberis. *Stylus* inclusus.—Species anomala. V. sicc.

** *Folia pilosa.*

47. *A. REFLEXA* (*Wall.! Catal. n. 2282, partim*), foliis oblongis acutis superne glabris subtus pubescentibus, pedunculis subterminalibus reflexis paucis foliis multo brevioribus pubescentibus, pedicellis umbellatis cum laciniis calycinis ovato-acutis dense pilosis. γ . In Martabaniâ (*Wall.!*).
Rami apice hispidi fulvique, pilis lente articulatis. *Folia* sparsa, 4—7 poll. longa, $1\frac{1}{2}$ — $2\frac{1}{2}$ poll. lata, basi satis abrupte in petiolum hispidum 4—5 lin. longum angustata, subtus pubescentia, pilis brevissimis sub lente solum perspicuis. *Pedunculi* semipollicares, duo tantum apice rami in nostro specimine. *Bracteæ* basi pedicellorum subulatæ, 2 lin. longæ. *Pedicelli* 3 lin. longi. *Lobi calycini* lineam longi. *Alabastrum* acuminatum. *Corolla fructusque* desunt.

Species cujus unicum specimen vidi, cum *A. amherstiana*, *n. 37.*, ejusdem regionis, in herbario ampl. cœtus Indiæ Orientalis et in Catalogo Wallichiano mixta.

48. *A. GRANDIFOLIA*, foliis oblongis amplis cuspidato-acutis superne glabris subtus pilosis, ramis et petiolis hispidis, pedunculis subterminalibus foliis multo brevioribus puberulis rigidis, pedicellis umbellatis, laciniis calycinis lanceolatis acutis subciliatis. γ . Circa Tavoy, olim regni Burmanici (*Wall.! ex Gomez*). *A. macrophylla*. *Wall.! Catal. n. 2290. non Blume.*
Folia 5—9 poll. longa, 3—4 poll. lata, in petiolum 4—8 lin. longum angustata, tenuia, nervo centrali subtus hispidissimo, lateralibus pilosis parum eminentibus. *Pedunculi* pollicem longi; *pedicelli* 6—8 lin. *Pili* foliorum ramorumque sericeo-purpurascens, sub lente articulati. *Laciniæ calycis* 2 lin. longæ, puberulæ. *Baccæ* ovoideæ, 3 lin. longæ, glabræ. V. sicc.

49. *A. MACROPHYLLA*. *Blume, Bijdr. tot Fl. Nederl. Ind. p. 691. non Wall.*

§ 2. *Folia crenata, dentata vel serrata.*

* *Folia glabra.*

50. *A. SERRATA*. *Pers. Anguillaria serrata. Cavan.! Icon. 503.*

51. *A. PYRAMIDALIS*. *Anguillaria pyramidalis*. *Cavan. Icon.* 502.
 52. *A. SPECIOSA*. *Blume, Bijtr. tot Fl. Nederl. Ind.* p. 684.
 53. *A. SERRULATA*. *Sw. Prodr.* p. 48.
 54. *A. FULIGINOSA*. *Blume, Bijtr. tot Fl. Nederl. Ind.* p. 692.
 55. *A. GLABRATA*. *Blume, ibid.*
 56. *A. MACROCARPA*. *Wall.! in Roxb. Fl. Ind.* ii. p. 277. *Catal. n.* 2267.
 57. *A. MEMBRANACEA* (*Wall.! Catal. n.* 2288.), glabra, foliis approximatis oblongo-lanceolatis acuminatis basi longissime attenuatis irregulariter crenulatis membranaceis, pedunculis axillaribus foliis quadruplo brevioribus, pedicellis approximatis brevibus, alabastris obtusis, laciniis calycinis ovato-acutis lobis corollæ subæqualibus, stylo inclusio. ♀ h. In montibus Silet (*Wall.! ex De Silva*).
- Suffrutex* ramis sublignosis cylindricis crassis medullâ faretis. *Folia* 4—5 poll. longa, 12—15 lin. lata, petiolis semipollicaribus, crenulata (exsiccatione forsân?), ubique punctata, nervis bene distinctis, foliis *A. oxyanthæ* similia. *Pedunculi* numerosi, pollicares, tenues, sæpe reflexi. *Flores* minimi, laxè fasciculati, pedicellis 1—3 lin. longis. *Lacinie calycis* et *corollæ* vix lineam longæ. V. sicc.
58. *A. WALLICHII*, foliis obovatis acutis vel obtusis in petiolum marginatum angustatis repandè crenulatis, pedunculis axillaribus foliis dimidio brevioribus ut pedicelli pilosiusculis, floribus laxè racemosis, laciniis calycinis ovato-acutis subciliatis, lobis corollæ ovato-acuminatis, antheris subsessilibus obtusiusculis, stylo inclusio. ♀ h. In ditione Burmanorum ad ripas Irrawaddy et Atran (*Wall.!*). *A. sanguinolenta*. *Wall.! Catal. n.* 2287. non *Blum.*
- Humilis, suffruticans, ramis crassis vix lignosis. Rami juniores foliaque succo sanguinolento scatentes. *Folia* 4—5 poll. longa, 2 poll. sæpius lata, crassiuscula. *Pedunculi* et *pedicelli* pilosiusculi, interdum ex basi plantæ, 1—2 poll. longi; bracteis acutis.
59. *A. JAPONICA*. *Hornstedt, Diss. Nov. Plant. Gen., pars i. pp.* 6, 7. *cum Ic. Thunb. Fl. Jap.* p. 95. *tab.* 18.
 60. *A. GLABRA*. *Bladhia glabra*. *Thunb. Fl. Jap.* p. 350.
 61. *A. PUMILA*. *Blume, Bijtr. tot Fl. Nederl. Ind.* p. 688.

62. *A. CRISPA*. *Bladhia crispa*. *Thunb. Fl. Jap.* p. 97. *Bauks, Ic. Kœmpf. tab. 7.*
A. elegans. Andr. Bot. Rep. tab. 623. *A. crenata. Roxb. Fl. Ind. ii. p. 276.*
Wall.! Catal. n. 2262. *A. glandulosa. Blum.? non Roxb.*
 β. corollâ albâ ex rubro punctatâ. *A. crenata. Sims, Bot. Mag. tab. 1950.*
A. lentiginosa. Ker, Bot. Reg. tab. 553.
 γ. corollâ albâ. *A. crenulata. Lodd. Bot. Cab. tab. 2.*

Specimina albiflora coluit Loddiges quæ postea florem album ex purpureo punctatum præbuerunt. *A. elegans Bot. Rep.* florem roseum habet, ut suspicor de plantâ Roxburghii et Wallichii, quod ex herbario non affirmare possum. An duæ species?

Hab. in Penang et Singapore (*Roxb. et Wall.!*), in Javâ (*h. Deless.!*), Japoniâ (*Kœmpf., Thunb.*), et Chinâ (*Lodd.*).

63. *A. PENTAGONA*. *A. quinqueгона. Blume, Bijtr. p. 689.*
 64. *A. PUNCTATA. Lindl. Bot. Reg. tab. 827.*

** *Folia pilosa.*

65. *A. CRENULATA. Vent. Choix de Plant. tab. 5.* *A. lateriflora. Sw.? In Porto-Ricco (Bertero! in h. DeC.), in Mexico inter Tampico et Real del Monte (Berlandier! in h. DeC.).*

Var. β. foliis coriaceis non pellucido-punctatis subtus valde pilosis. Ex hort. Paris.

Variat foliis subintegris vel plus minusve repandis et pilosis.

66. *A. CUBANA*, foliis ovato-oblongis obtusiusculis undulatis superne glabris subtus pilosiusculis, paniculis terminalibus ramosis foliis subæqualibus, pedunculis ferrugineis, laciniis calycinis acutis, lobis corollæ 5-partitæ lineari-lanceolatis patentibus velutinis. ♀. In Cubâ (*Ram. de la Sagr.!* in *h. DeC.*).

Rami extremi et pedunculi velutini. *Folia* 2—3 poll. longa, 8—15 lin. lata, subintegra, obtusa vel acutiuscula, in petiolum 4—6 lin. longum angustata, subtus glabra vel pilosiuscula, pilis stellatis. *Panícula* multiflora. *Alabastra* ovoideo-conica, angulosa, velutina. *Flores* ut in *A. crenulatâ*,

lobis corollæ tamen angustioribus, margine non cinerascentibus. Ab eâ specie vix differt, nisi foliis minoribus obtusis minus repandis.

67. A. ICARA (*Wall.! Catal. n. 2264. ex h. Hamilt.!*), foliis oblongo-lanceolatis basi acuminatis apice acutis denticulatis superne pilosiusculis subtus glabris pallidioribus, paniculis ramosis subterminalibus foliis subæqualibus, pedunculis pedicellis umbellatis floribusque velutinis, laciniis calycinis subulatis, corollæ lobis ovato-acutis. TAB. VII. 7. In Bengaliâ circa Bhatgong et Mateabo (*Hamilt.!*).

Rami lignosi. *Folia* semipedalia, 1—2 poll. lata, superne primo aspectu glabra sed tamen pilosiuscula pilis simplicibus ubique sparsis, subtus glabra punctis crebris minimis adspersa, denticulis numerosis acutis. *Paniculæ* elongatæ axillis foliorum superiorum; bracteis linearibus 3—4 lin. longis; pedunculis alternis axillis bractearum illis triplo quadruplove longioribus, pedicellis umbellatis 3 lin. longis bracteolis verticillatis basi circumdatis. *Laciniæ calycis* angustiores quam in congeneribus. *Antheræ* ovoideæ, acuminatæ, lobis corollæ breviores, filamentis multo longiores. *Ovarium* cylindricum. *Stylus* filiformis, staminibus duplo longior. V. sicc.

68. A. ODONTOPHYLLA (*Wall.! Catal. n. 2279.*), foliis lanceolato-oblongis utrinque acutis longe petiolatis argute dentatis puberulis, racemis axillaribus foliis multo brevioribus, pedicellis brevibus alternis ut pedunculi velutinis, lobis calycinis ovato-acutis ciliatis et puberulis, corollæ profunde partitæ lobis ovato-acutis. TAB. VI. 7. A. pavonina herb. *Hamilt.!* In Bengaliâ, versus Sillet (*Wall.! ex De Silva*) et circa Gualpara (*Hamilt.*).

Rami non lignosi, medullâ farcti, adscendentes, teretes, velutini. *Folia* 4—6 poll. longa, 2—2½ poll. lata, petiolis pollicaribus. *Racemi* 1—3 poll. longi, pedicellis 3 lin. longis tenuibus, bracteis subulatis angustissimis 1—3 lin. longis. *Alabastra* acuminata. *Lobi calycis* lineam longi, corollâ duplo breviores. *Antheræ* triangulares, subacutæ, filamentis multo longiores. V. sicc.

69. A. MOLLIS. *Blume, Bijtr. tot Fl. Nederl. Ind. p. 689.*

70. A. TAVOYANA, ramis extremitate pubescentibus, foliis oblongo-lanceolatis utrinque acuminatis superne glabris subtus pilosis et valde punctatis subcrenulatis tenuibus, pedunculis lateralibus simplicibus velutinis folio

subbrevioribus, pedicellis umbellatis, laciniis calycinis lineari-lanceolatis acuminatis extus pilosis. ʔ. Circa Tavoy, olim regni Burmanici (*Wall.!* ex *Gomez*). *A. villosa*. *Wall.!* *Catal. n.* 2280, B.

Ab *A. villosa* (*Wall.* 2280, A.) differre videtur foliis paulo majoribus (4—6 poll.), subtus pilosis (pilis non adpressis et bene perspicuis), oculo nudo punctatis, tenuioribus, margine magis revolutis et crenulatis; pedunculis paulo brevioribus. Folia nonnunquam ex apice pedunculorum nascuntur. Corolla ignota. Bacca globosa, pilosiuscula, lobis calycinis obtecta. Pili, ut in *A. villosa*, articulati. V. sicc.

71. *A. VILLOSA*. *Roxb. Fl. Ind.* ii. p. 274. *Wall.!* *Catal. n.* 2280, A.

72. *A. PUSILLA*. *Bladibia villosa*. *Thumb. Fl. Jap.* p. 96. *tab.* 19.

73. *A. VESTITA*. *Wall.!* in *Roxb. Fl. Ind.* ii. p. 274., *Catal. n.* 2281

Sectio 2. *Hymenandra*.

Antheræ connatæ. *Stylus* staminibus longitudine subæqualis. *Stigma* punctiforme. *Bracteæ* pedicellis multo breviores.

74. *A. HYMENANDRA*. *Wall.!* in *Roxb. Fl. Ind.* ii. p. 282. *Wall.!* *Catal. n.* 2266.

75. *A. GLANDULOSA*. *Roxb. Fl. Ind.* ii. p. 276. *Wall.!* *Catal. n.* 2265.

Sectio 3. *Micranthera*.

Filamenta elongata. *Antheræ* liberæ filamentis multo breviores. *Stylus* staminibus non longior, subulatus.

§ 1. *Stylus* staminibus subæqualis. *Antheræ* effœtæ horizontales contortæ.

76. *A. CORIACEA* (*Sw. Prodr.* p. 48., *Fl. Ind. Occ.* i. p. 470.), glabra, foliis oblongis obtusiusculis integerrimis coriaceis, paniculâ terminali pyramidali foliis sublongiore, lobis calycinis ovatis obtusiusculis, corollæ 5-partitæ lobis ovato-acutis reflexis, filamentis apice tubi corollæ insertis subconnatissimis antheris sublongioribus. ʔ. In Guadaluppâ et Hispaniolâ (*Bertero!* in *h. DeC.*). Flore et inflorescentiâ ad Walleniam accedens.

77. *A. HAMILTONII*. *A.* obovata. *Hamilt. Prodr. Fl. Ind. Occ.* p. 26. non *Blume*, An a præcedente diversa?

78. *A. EXCELSA* (*Chr. Smith!* in *h. DeC. et Deless.*), foliis ovato oblongis ob-

tusiusculis mediocribus integris glabris, pedunculis axillaribus, pedicellis umbellatis pedunculis longioribus, laciniis calycinis acutis glabris, alabastris acutis, lobis corollæ 5-partitæ lanceolatis calyce triplo longioribus, staminum filamentis subulatis, antheris duplo longioribus. ♀. In Canariis, ubi vulgò *Aderno*, et in Maderâ (*Lowe*!). Pedunculis brevissimis ad Myrsines accedit.

§ 2. Stylus staminibus duplo brevior. Antheræ erectæ.

79. A. *Lhotskya*, glabra, foliis oblongis integris obtusiusculis punctatis, paniculis terminalibus et axillaribus folio brevioribus multifloris, pedicellis umbellulatis, calycis 5-fidi lobis acutis, corollæ profunde 5-fidæ infundibuliformis lobis oblongis, filamentis longitudine corollæ. ♀. In Brasiliâ, veris. circa Rio Janeiro (*Lhotsky*! in *h. DeC.*).

Arbor altitudine ignota. *Rami* cortice rugoso. *Folia* apice ramorum 2—3 poll. longa, 1—1½ poll. lata, obtusa vel acutiuscula, in petiolum marginatum angustata, tenuia, ubique punctulata, punctis nigricantibus. *Pedunculi* et *pedicelli* articulati, bracteis ovatis minimis caducis, pedicellis tenuibus 2 lin. longis. *Calyx* vix lineam longus. *Lobi corollæ* albidii, ex luteo maculati, sesquilineares, suberecti. *Filamenta* basi imæ corollæ inserta, filiformia, per anthesin accrescentia. *Antheræ* ovoideæ, filamentis breviores, medio affixæ, erectæ, luteæ. *Ovarium* superum. *Stylus* filiformis, subulatus. V. sicc.

80. A. *RACEMOSA*. *Spreng. Syst. i. p. 661.*

81. A. *LEPIDOTA*. *Kunth in Humb. et Bonpl. Nov. Gen. iii. p. 247.* Longitudo styli ignota.

Sectio 4. *Tyrbæa*.

Flores laxè paniculati pedunculis alternis. *Bracteæ* amplæ, caducæ, floribus alternis subsessilibus majores.

82. A. *BRACTEOSA*, foliis oblongis subacutis integris coriaceis, bracteis ovato-acutis, lobis calycis et corollæ ovato-acutis, antheris ovoideis horizontalibus filamento minoribus, stylo staminibus sublongiore. ♀. In Mexico. *Tyrbæa*. *Mocino et Sesse, Icon. Mexic. ined.*

Arbor ramis lignosis fuscis. *Folia* approximata, alterna, 3—4 poll. longa, 1—1½ poll. lata, plus minusve acuta in petiolum brevem submarginatum angustata. *Panicula* foliis longior, ramosa, laxa, pedunculis seu ramis inferioribus subpendulis fructiferis bracteis caducis, superioribus floriferis spiciformibus 4—8-floris erectis, floribus alternis solitariis apice approximatis. *Bractee* ovato-acutæ, 6—8 lin. longæ, alabastra obtegentes, sessiles, integræ, fuscæ, per anthesin caducæ. *Calyx* 5-fidus, tubo ovoideo, lobis glabris. *Corolla* albo-rosea, calyce dimidio longior, tubo cylindrico, lobis reflexis. *Stamina* lobis corollæ opposita, horum basi inserta; filamenta capillacea lobis corollæ sublongiora; antheræ ovoideæ, minimæ, horizontales, luteæ. *Stylus* subulatus. *Bacca* brevipedicellata, ovato-globosa, stylo terminata, in icone viridis. *Semen* pericarpio conforme, ovoideum, acutiusculum. (Ex icone.)

83. *A. ESCULENTA* (Pav.! in *h. Moricand*), foliis ovato-oblongis subacutis integris coriaceis glabris punctatis, petiolis marginatis, paniculâ foliis longiore, bracteis ovatis obtusiusculis, lobis calycinis ovato-acutis ciliatis, antheris filamentis longioribus triangularibus acutis, stylo subulato incluso. 5. In Americâ meridionali.

Folia 3—4 poll. longa, 1—1½ poll. lata, in petiolo marginatos angustata, subtus punctis resinosis crebris nigricantibus notata. *Flores* omnes nondum aperti. *Panicula* ramosa, ramis erectiusculis, oculo armato subvelutinis. *Bractee* amplæ, 3—6 lin. longæ, erectæ, flores amplectentes, fuscæ. *Lobi calycis* imbricati, subinæquales, lineam longi. *Corolla* nondum aperta obtusa, intra lobos calycis. *Lobi* ovati, glabri, maculati. *Filamenta* basi corollæ inserta, lobis corollæ opposita, tenuia. *Antheræ* filamentis multo longiores, erectæ, rigidæ. *Ovarium* globosum. V. sicc. in *h. Moric.*

Vix differt a præcedente, tamen stamina diversissima, ex icone supra citatâ.

84. *A. FETIDA*. *Ræm. et Sch. Syst.* iv. p. 803., ex plantâ *Humb. in h. Willd.*

Ardisiæ non satis notæ.

85. *A. BAHAMENSIS*. *Heberdenia excelsa* *Herb. Banks.* ex *Gærtn.* *Anguillaria bahamensis.* *Gærtn. Fruct.* i. p. 372. *tab.* 77. *f.* 1.

86. A. LINEATA. *Rœm. et Sch. Syst. iv. p. 804., ex h. Willd.*
87. A. DIVARICATA. *Ibid.*
88. A.? PARVIFOLIA. *Ibid.*
89. A.? PARASITICA. A. parasitica. *Sw. Prodr. p. 48.*
90. A.? ARGUTA. A. arguta. *Kunth in Humb. et Bonpl. Nov. Gen. iii. p. 247.*
91. A. OVATA. *Thunb. Nov. Gen. pars viii., Ups. 1795, ex Rœm. et Sch.*

X. EMBELIA.

Ribesioides. *Linn. Zeyl. n. 403.*

Embelia. *Juss. Gen. p. 427. Roxb. Fl. Ind. ii. p. 285.*

CHAR. *Calyx* 5-partitus. *Corolla* 5-partita, lobis æstivatione subvalvari. *Stamina* 5, lobis corollæ longitudine subæqualia. *Antheræ* ovoidæ, filamentis liberis multo breviores, per anthesin horizontales. *Ovarium* superum, 1-ovulatum (ex *Wall.*). *Stylus* staminibus brevior. *Stigma* capitelatum. *Bacca* globosa. *Semen* unum.

VEGET. Frutices asiaticæ, sæpius scandentes; petiolis nonnunquam denticulatis; racemis axillaribus vel terminalibus, simplicibus vel ramosis; floribus parvis; alabastris obtusis; pedunculis et pedicellis alternis sæpius pilosis aut velutinis.

* Paniculæ vel racemi terminales.

1. E. RIBES. *Roxb. et Wall. Fl. Ind. ii. p. 284., Catal. n. 2304. Ribes. Burm. Ind. lxii. tab. 23.* Fragmentum vidi ex herb. Burmann, cum alterâ specie omnino diversâ mixtum, quod a speciminibus cl. Wallich differt solum folio obtuso. In eo caractere admodum variant omnes Embeliæ.—*Hab.* in Sillet (*Wall.!*), Golgiporti (*Hamilt.!*), Penang (*Wall.!*), et Singapore (*Wall.!*). In spec. e Singapore fructus cylindracei adsunt, insectus punctione.
2. E. CANESCENS. *Wall. ex Jack in Roxb. Fl. Ind. ii. p. 292. Catal. n. 2311.*

** Racemi axillares.

3. E. FERRUGINEA (*Wall. Catal. n. 2310.*), ramis junioribus et pedunculis tomentosis ferrugineis, foliis ovato-rotundatis integris coriaceis superne glabris, subtus et petiolo stellatim pilosis rubiginosis. h. Ad ripas Irrawaddi.

Rami seniores lignosi albidi, juniores pilosi et rubiginosi. *Folia* late ovata, 5-pollicaria, obtusa vel acuta, superne nervis subvelutinis, petiolis semipollicaribus pilosis non alatis. *Flores* desunt in spec. *Bacca* globosa, vix lineam longa, teres, in herbario nigricans. V. sicc.

Ab *E. villosa* differt cortice non maculato, ramis junioribus petiolis et paginâ inferiore foliorum magis pilosis et rubiginosis.

4. *E. VILLOSA*. *Wall.! in Roxb. Fl. Ind. ii. p. 289. Catal. n. 2313.* *E.?* reticulata *Wall.! Catal. n. 6521.* γ . Circa Rajmahl et Tavoy (*Wall.!*). Variat foliis late obovato-rotundatis valdeque pilosis, vel ovato-acutis parvis glabriusculis. Pili parietibus interioribus donati.

5. *E. PICTA* (*Wall.! Catal. n. 2302.*), ramis et pedunculis velutinis ferrugineis, foliis ovalibus glabriusculis remote denticulatis, racemis axillaribus foliis longioribus simplicibus, calyce et corollâ velutinis. γ . In Gongachara et Goalpara Indorum (*Hamilt.!*). Samara picta, *herb. Hamilt.!*

Rami pilosi, ex albo maculati. *Folia* 3—5 poll. longa, 2—3 lata, superne glabra, subtus glabriuscula et pallidiora, punctis minimis nigris remotè notata, in petiolum semipollicarem angustata, plus minusve cuspidato-acuminata vel obtusa, integra vel remotè denticulata. *Racemi* numerosi, elongati. *Flores* ut in *E. villosa*. V. sicc.

6. *E. FLORIBUNDA*. *Wall.! in Roxb. Fl. Ind. ii p. 291. Catal. n. 2305, A.*

β . macrophylla; foliis longioribus. *E. floribunda?* *Wall.! Catal. n. 2305, B.*

Agnoscitur præcipue punctis majoribus prope marginem foliorum seriatim dispositis. α . in Nepaliâ, β . in Sillet.

7. *E. VESTITA*. *Roxb. Fl. Ind. ii. p. 288. Wall.! Catal. n. 2306.*

8. *E. NUTANS*. *Wall.! in Roxb. Fl. Ind. ii. p. 290. Catal. n. 2303.*

9. *E. ROBUSTA*. *Roxb. Fl. Ind. ii. p. 287.*

10. *E. PARVIFLORA* (*Wall.! Catal. n. 2307.*), foliis bifariis parvis approximatis ovato-acutis basi obtusis integris glabris nitidis, racemis axillaribus foliis brevioribus, floribus parvis dense umbellulatis, pedunculis velutinis. γ . In Sillet.

β . major: foliis oblongis utrinque acutis majoribus subdentatis.

11. *E. UROPHYLLA* (*Wall.! Catal. n. 2309.*) glaberrima, foliis ovato-lanceolatis utrinque acuminatis integris coriaceis nitidis, pedunculis simplicibus elongatis foliis subæqualibus, pedicellis brevissimis. ♀. Singapore (*Wall.!*).

Rami lignosi, non crassi. *Folia* 2—3 poll. longa, 1—1½ poll. lata, nitida, non punctata, basi sensim angustata, apice abrupte angustata, id est longe cuspidata. *Pedunculi* nonnunquam basi ramosi, bracteis tenuissimis vix lineam longis alternis stipati. *Flores* axillis bractearum subsessiles, axillâ ejusque bracteæ solitarii, minimi. *Alabastra* obtusa, nimis juniora solum vidi. V. sicc.

Species dubiæ.

12. *E.?* TSJERIAM-COTTAM. Tsjeriam-Cottam. *Rheed. Malab. v. p. 21. tab. 11.* Basal, n. 2. *Lam. Dict. i. p. 381.* Ardisia? Tsjeriam-Cottam. *Rœm. et Sch. Syst. iv. p. 518.*
13. *E.?* BASAAL. Basaal. *Rheed. Malab. v. p. 23. tab. 12.* *Lam. Dict. i. p. 381. n. 1.* Ardisia? Basaal. *Rœm. et Sch. Syst. iv. p. 517.*

XI. CHORIPETALUM.

Myrsines dubiæ. *Wall.*

CHAR. *Calyx* 4-fidus. *Corolla* 4-petala! petalis separatim cadentibus! *Stamina* 4, petalis opposita, imâ basi cum illis connata. *Antheræ* filamentis breviores. *Stylus* filiformis, petalis brevior. *Ovarium* superum (an interdum abortivum? floribus tunc polygamis). *Drupa* globosa, monosperma.

VEGET. Plantæ asiaticæ, lignosæ. *Folia* alterna, integra, glabra, basi ovata et in petiolos longos angustata. *Flores* racemosi, pedunculis axillaribus, bracteis persistentibus alternis minimis. Inflorescentia ideo Embeliæ.

OBSERV. Species habitû satis similes, præcipue formâ et nervatione foliorum, adhuc in herbariis rarissimæ, floribus nondum optime notis. Corollâ polypetalâ, ut videtur, hoc genus vergit ad Rhamneas.

NOMEN a *χωρίς* separatim et *πετάλον* petalum.

1. *C. AURANTIACUM*, foliis ovato-lanceolatis, pedunculis spiciformibus simplicibus foliis triplò brevioribus, petalis lanceolatis, staminum filamentis pe-

talibus longioribus. ♀. In peninsulâ Indicâ (*Wall.!* ex *h. Heyn.*), Myrsine? aurantiaca. *Wall.!* in *Roxb. Fl. Ind.* ii. p. 300. *Catal. n.* 2299.

Calycis lobis minimi, acuti, crassiusculi. *Petala* recurvata, 1—1½ lin. longa, maculis aurantiacis insignia. *Stamina* cum basi petalorum connata, iis longiora, filamentis tenuissimis, antheris lanceolatis parvis. *Stylus* filiformis, inclusus, an abortivus in speciminibus masculis? *Drupa* (ex *h. Wight.*) globosa 2 lin. lata, luteola, omnino *Myrsineæ*. *Semen* pericarpium implens. *Albumen* corneum. *Embryo* transversus, dorso superiorem partem seminis spectante. V. sicc.

2. *C. UNDULATUM*, ramorum lenticellis callosis, foliis ovatis vel lanceolatis, utrinque acutis subundulatis tenuibus pellucido-punctatis, pedunculis foliis triplo brevioribus, petalis lanceolatis acutis glanduloso-ciliatis. ♀. In Napaliâ. Myrsine? undulata. *Wall.!* in *Roxb. Fl. Ind.* ii. p. 299. *Catal. n.* 2301.

Specimina imperfecta solum vidi. *Calyx* 4-fidus, lobis ovato-acutis. *Petala* calyce triplo majora, patentia, minora quam in præcedente, duobus in æstivatione exterioribus et duobus interioribus, nonnunquam separatim deciduis. *Stamina* (ex *Wall.*) paulo supra basin petalorum inserta. *Ovarium* conicum. *Ovula* (ex *Wall.*) 2, medio placentæ centralis affixa. *Stigma* (ex *Wall.*) infundibuliforme. V. sicc.

Tribus III. MÆSEÆ.

CHAR. *Calyx* 5-lobus. *Corolla* 5-loba, æstivatione induplicatâ. *Stamina* 5, libera, basi corollæ inserta, inclusa, antheris ovoideis cordatis filamentis longitudine subæqualibus. *Ovarium* adhærens, semi-inferum, multiovulatum. *Stylus* brevis. *Stigma* obscure 3—5-lobatum. *Semina* placentæ centrali affixa, numerosa, minima, angulosa. *Embryo* transversus.

VEGET. Frutices vel arbores, asiaticæ aut africanæ. Folia alterna, nonnunquam pellucido-punctata, in eodem specimine variabilia. Racemi sæpius axillares, simplices vel ramosi, multiflori, floribus alternis brevipedicellatis, bracteis 2 suboppositis prope basin calycis.

AFFIN. Ad Primulaceas (Samolum præcipue) accedens.

XII. MÆSA.

Mæsa. *Forsk.*

Bæobotrys. *Forst. Nov. Gen.*

Sibouratia. *Aub. Dupet. Th. Nov. Gen. Madag. p. 12.*

Characteres supra dicti. Nomen veterius retinendum.

Species.

* Paniculæ vel racemi terminales.

1. *M. PANICULATA* (*Wall.! Catal. n. 2320.*) glaberrima, foliis late ellipticis utrinque acutis maximis dentatis, racemis axillaribus et terminalibus elongatis gracilibus. γ . Tavoy olim Burinanorum (*Wall.! ex Gomez*).

Folia semipedalia, 3 poll. lata, membranacea, nitida, parum punctata, grosse et acute dentata, nervis perspicuis, petiolis tenuibus semipollicaribus. *Panicula* terminalis, semipedalis, parum ramosa, nuda, bracteolis alternis subulatis secundum pedunculos. *Flores* approximati. *Lobi calycis* ovato-acuti, glabri. *Corolla* tubulosa, calyce duplo longior. *Stamina* corollâ duplo minora. *Stigma* 3-lobum. *Bacca* ovoidea, vix lineam longa. V. sicc.

2. *M. MUSCOSA.*

3. *M. VIRGATA.*

4. *M. LATIFOLIA.*

} *Blume, Bijtr. tot Fl. Nederl. Ind. p. 864—866.*

** Racemi sæpius laterales.

5. *M. OVATA* (*Wall.! Catal. n. 2324.*) glabra, foliis ovato-acuminatis subcordatis integris utrinque nitidis, racemis axillaribus elongatis gracilibus folio sublongioribus. TAB. IV. γ . In Penang (*Wall.!*).

Rami teretes, non punctati. *Folia* 2—3 poll. longa, sesquipollicem lata, integerrima, sæpius cordata, membranacea, nervis distinctis. *Racemi* 2—4 poll. longi, floribus non numerosissimis. V. sicc.

A *M. ramentacea* vix differt, nisi racemis valde elongatis parum ramosis, pedicellis longioribus et baccis majoribus.

6. *M. RAMENTACEA.* *Roxb. Fl. Ind. ii. p. 233.* *Wall.! Catal. n. 2322.* Bæo-

botrys lucida. *Wall.! Catal. n. 2323.* In Sillet, in regno Burmanico circa Rangoon, Moalmyne et Tavoy (*Wall.!*). In speciminibus e regno Burmanico folia 3-pollicaria sæpius, in illis e Sillet 4—5 poll. et in cultis 7.

7. *M. MISSIONIS*, glabra, foliis ovato-acuminatis integris, racemis folio brevioribus. η . In Indiâ Orientali (*Wall.! ex h. Madr.*). *Bæobotrys?* *missionis. Wall.! Catal. n. 6523.*

Fragmenta vidi, quæ sine dubio speciem mediam inter *M. ramentaceam* et *nemoralem* constituunt. *Rami* glabri. *Folia* 1—3 poll. longa, 6—15 lin. lata, longe acuminata, basi subacuta, minime dentata. *Flores* ut in *M. nemorali*.

8. *M. NEMORALIS*. *Bæobotrys nemoralis. Forst. Nov. Gen. p. 22. Vahl, Symb. p. 19.? Roxb. Fl. Ind. ii. p. 232. Wall.! Catal. n. 2319. Mart. Choix de Pl. du Jard. de Munich, p. 6. tab. 6.*
9. *M. INDICA*. *Mæsa. Forsk. Bæobotrys indica. Roxb. Fl. Ind. ii. p. 230. Wall.! ibid. et Catal. n. 2318. Bæobotrys lanceolata. Vahl, Symb. i. p. 19. tab. 6. Blume, Bijtr. p. 865.? Mæsa Chisia. Don, Prodr. p. 148.?*
10. *M. DUBIA. Wall.! in Roxb. Fl. Ind. ii. p. 235. Catal. n. 2317.*
11. *M. ARGENTEA. Wall.! in Roxb. Fl. Ind. ii. p. 233. Catal. n. 2316.*
12. *M. MACROPHYLLA. Wall.! ibid. p. 234. Catal. n. 2325. M. tomentosa. Don, Prodr. p. 148.?*
13. *M. MOLLIS. Blume, Bijtr. p. 865.*
14. *M. MOLLISSIMA. Blume, ibid. p. 866.*

MYRSINÆ GENERIS INCERTI.

1º. *Asiaticæ.*

1. *ENBELIA?* *LUCIDA. Wall.! Catal. n. 2315. Rami* lignosi, cinerascetes. *Folia* alterna, ovalia, 2—4 poll. longa, 1—2 lata, utrinque acuta, coriacea, integra, margine subrevoluta, vix punctata, petiolis 3 lin. longis, transverse rugosis, nervis lateralibus prope marginem arcuatis. *Pedunculi* spiciformes, axillares, solitarii vel geminati, foliis quadruplo breviores, velutini, basi bracteolis imbricatis ovato-acutis obtekti, per totam longi-

tudinem bracteas alias dentiformes alternas gerentes. *Ovarium* sessile, axillis bractearum, ovoideum, $\frac{1}{2}$ lin. longum, stigmate 2—5-lobo terminatum. *Flores* desunt in speciminibus maxime truncatis.—*Hab.* In Singapore (*Wall.*!).

Ex ovario, stigmate et bracteis circa basin pedunculorum *Myrsine* videtur, sed floribus alternis secundum pedunculos *Embelias* refert.

2. *EMBELIA*? *CORIACEA*. *Wall.*! *Catal. n.* 2314. Fragmenta solum vidi. *Rami* lignosi, striati, nigricantes. *Folia* lanceolata, acuta, semipedalia, sesquipollicem lata, integra, glabra, coriacea, subtus glancescentia nervo centrali eminente, lateralibus vix perspicuis, punctis minimis ubique sparsis. *Panicula* terminalis, elongata, longitudine foliorum, laxa, pedunculis et pedicellis pilosiusculis angulo recto divergentibus, bracteis 1—6 lin. longis. *Calyx* glaber. *Corolla*? *Baccæ* sphaericæ, lineam latæ, punctatæ, glabræ. *Stylus* bacca brevior, stigmate capitato. *Folia* inflorescentia *Ardisiæ*, sed stigma capitellatum.—*Hab.* Verisimiliter in Penang (*Wall.*!).
3. *MYRSINE*? *UMBELLULATA*. *Wall.*! *Catal. n.* 2312. *Rami* lignosi, glabri. *Folia* 2—3 poll. longa, 8—12 lin. lata, oblonga, obtusa, glabra, subdenticulata, margine revoluta, crassiuscula, parum sed ubique punctata. *Flores* axillares, pedunculo communi crasso brevissimo bracteis ovato-acutis concavis subciliatis brevibus obtecto; pedicellis umbellatis, 3—4 lin. longis, filiformibus, glabris, numero 4—6. *Calyx* 5-partitus. *Corolla*?—*Hab.* In Singapore (*Wall.*!). Inflorescentia *Myrsines*. V. sicc.
4. *ARDISIA*? *SPICATA*. *Wall.*! *Catal. n.* 2273. *Habitus Myrsinearum* diversissimus. *Rami* sublignosi, glabri. *Folia* longissime petiolata, glabra, petiolo 3 poll. longo basi per spatium semipollicare dilatato marginato subvaginate! limbo ovato utrinque acuto, 3—4 poll. longo, $1\frac{1}{2}$ — $2\frac{1}{2}$ poll. lato, repande crenulato, coriaceo, pellucide subpunctato, nervatione admodum singulari (pro Ordine) nervis lateralibus crebris parallelis distinctissimis usque prope marginem, nervulis minoribus transversis vix perspicuis. *Pedunculi* axillares, 1—3 poll. longi cum pedicellis floribusque subpuberuli, ramulos laterales multifloros vel unifloros alternos gerentes; pedicellis sæpius apice ramulorum umbellulatis, 2 lin. longis. *Bracteæ* basi pedicellorum et pedunculorum subulatæ, minimæ, caducæ. *Calyx* profunde 5-fidus, $\frac{1}{2}$ lin. longus, lobis tenuibus subulatis erecto-incurvatis. *Corolla*

et *stamina* desunt in specimine. *Ovarium* superum, ovoideum, stylo filiformi calycis longitudine terminatum. *Bacca* globosa, 2 lin. crassa, monosperma, omnino *Ardisiæ*.—*Hab.* In Singapore (*Wall.*!).

Inflorescentia Choripetali. Ex petiolis basi dilatatis, Alismaceam simulantibus, genus prorsus novum suspicor.

5. *ARDISIA DENTICULATA*. *Blume, Bijtr.* p. 691.

6. *MESA TETRANDRA*. *Roxb. Fl. Ind.* ii. p. 233.

2°. *Africanæ* (An gen. *Badula*?).

7. *ARDISIA MICROPHYLLA*. *Ræm. et Sch. Syst.* iv. p. 804. ex *Dupet. Th.* in *h. Willd.*

8. *ARDISIA FLORIBUNDA*. *Ibid.*

9. *ARDISIA PYRIFOLIA*. *Ibid.*

10. *ARDISIA ERYTHROXYLOIDES*. *Ibid.*

3°. *Americane*.

11. *MYRSINE SPICATA*. *Kunth, in Humb. et Bonpl. Nov. Gen.* iii. p. 250. An *Weigeltiæ nostræ* affinis? differre tamen videtur formâ et magnitudine antherarum. Inflorescentia non *Myrsines*.

12. *ARDISIA BRASILIENSIS*. *Spreng. Syst.* i. p. 662.

4°. *Originis incertæ*.

13. *ARDISIA MULTIFLORA*. *Ræm. et Sch. Syst.* iv. p. 804. ex *h. Willd.*

SPECIES EXCLUSÆ.

1. *ARDISIA TURBACENSIS*. *Kunth, Nov. Gen.* iii. p. 245. Ex descriptione optimâ fructus seminisque *Sapotea* potius videtur.

2. *BEOBOTRYS ACUMINATA*. *Wall.! Catal.* n. 2321. Corolla polypetala. *Stamina* petalis alterna. An circa *Rhamneas* investiganda?

3. *EMBELIA*? *RAMOSA*. *Wall.! Catal.* n. 6522. Folia impunctata. Petala 0. *Stamina* quinque, basi lorum perigonii inserta iisque opposita. *Stigma* discoideum dentatum. An versus *Urticeas*?

4. *ARDISIA ACEROSA* *Gærtn.* est *Cyathodes acerosa* *R. Brown.*
5. *ÆGICERAS MINUS* *Gærtn.* est *Connarus santaloides* *Vahl, ex Kænig.*
6. *MYRSINE* ? *THEÆFOLIA* *Wall.!* *Catal. n. 6391.* non est *Myrsinea*, nam stamina sunt lobis corollæ alterna.

GENERA EXCLUSA.

1. *OPILIA.* *Roxb.* Specimen vidi a clar. Wallich donatum, quod *Groutiae Perrott. et Guill. Fl. Seneg. i. p. 100. tab. 22.* simillimum, ut monent clar. auctores, ad ordinem Olacinearum retulerunt.
2. *SAMARA.* *Linn.* non *Sw.* *Cornus zeylanica.* *Burm.!* *Zeyl. tab. 76.* Ad *Rhamneas* referenda cum celeb. *Jussieu.*
3. *CLAVIJA.* *Ruiz et Pav. Prodr. Fl. Peruv. p. 131. Ic. 30. Desfont. Nouv. Ann. Mus. i. p. 398. cum icone.* Genus a clar. Desfontaines optime descriptum, sed, ut *THEOPHRASTA*, inter *Sapoteas* potius locandum, propter fructum et præcipue appendices corollæ. Antheræ non solum connatæ, sed extrorsæ (in *Clavijâ*), aliquid novum in hisce ordinibus præbent. An, præeunte cl. *Bartling*, ordo distinctus *Theophrasteacearum* instituendus?

TABULARUM EXPLICATIO.

- TAB. IV. *Mæsa ovata.* *Wall.* Fig. 1. ramus cum flore; 2. flos corollâ ademptâ; 3. corolla; 4. drupa; 5. drupa pericarpio superne adempto seminibus placentæ appressis; 6. semen, ubi umbilicus in *a*.
- V. *Badula Sieberi.* *Alph. DeC.* Fig. 1. pedicellis cum flore et bracteâ; 2. flos; 3. corolla aperta; 4. calyx auctus corollâ caducâ; 5. facies interna staminis; 6. ovarium longitudinaliter sectum; 7. pagina inferior folii; 8. folium majus ex altero specimine.
- VI. *Ardisia odontophylla.* *Wall. ex h. Hamilt.*
- VII. *Ardisia Icara.* *Wall. ex h. Hamilt.* Fig. 1. pagina inferior folii superioris; 2. pagina inferior folii inferioris; 3. flos; 4. flos corollâ

ademptâ; 5. pedunculus cum pedicellis umbellatis; 6. corolla aperta.

TAB. VIII. *Ardisia neriifolia*. Wall. Fig. 1. pagina inferior folii; 2. et 3. alabastra; 4. flos apertus; 5. anthera secta; 6. anthera interne visa; 7. flos longitudinaliter sectus; 8. ovarium cum stylo; 9. sectio geometrica floris; *a.* lobi calycis; *b.* lobi corollæ; *c.* stamina; *d.* pistillum.